

**VOLUME II OF IV** 

Prepared for: CHEMICAL LAND HOLDINGS, INC.

Prepared By: EI GROUP, INC.

December 18, 2001

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Scientific Chemical Processing, Inc.

### Scientific Chemical Processing (Newark)

411 Wilson Avenue

**Newark City** 

**Essex County** 

CATEGORY: Non-Superfund

TYPE OF FACILITY: Waste Processing

State Lead

**OPERATION STATUS: Ceased** 

PROPERTY SIZE: 3.7 Acres

SURROUNDING LAND USE: Industrial

**MEDIA AFFECTED** 

CONTAMINANTS

STATUS

Ground Water

Volatile Organic Compounds

Rotential:

Polychlorinated Biphenyls (PGBs)

Volatile Organics

Confirmed C

(Polychlothaled Bishenyls (PCES)) (

FUNDING SOURCE(S): Responsible Parties

ACO SIGNED: No

FINANCIAL ASSURANCE: None

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

Former operations consisted of the recovery of wastes of vants, Polychlorinated Biphanyle (PCBs), (wastern dother hazardous wastes. The quantity of these wastes stored at this site was estimated at 3700 fifty-five gallon drums, ten bulk liquid tankers (ranging in size from 5000 to 7000 gallons), 17 steel stationary storage tanks (from 8000 to 20,000 gallons), ten process tanks (ranging from 1000 to 10,000 gallons) and 4000 laboratory chemical reagent and process sample bottles (plastic, glass and metal). Various hazardous chemicals were improperly stored and the drums were deteriorating and haphazardly stacked. Tankers were leaking and/or corroding. An Immediate Removal Action was completed in 1987. It consisted of the removal of the drums, tanks and lab packs. The site is considered to be a "Multi-Generator" site, with 120 Potential Responsible Parties (PRP). Under this designation, negotiations to conduct a Remedial Investigations (RI) and any further remediation if required, will be conducted under the Division of Law within the Department of Law and Public Safety.

FOR FURTHER INFORMATION CONTACT: Site Remediation Program Bureau of State Case Management 609-633-0719

PROJECT NAME	RI/FS	DESIGN	CONSTR	
Surface Removal		e	* <del>**</del>	
Sitewide				Planned
				Underway
				Completed or

Celanese Chemical Company, Inc.

Facility Name: CHEANESEK CHEM (CO INC.)

Address: 354 DOREMUS AVE NEWARK, NJ 07105

EPA ID: NJD079323044 EPA Region: 02 County Code: 013

\_\_\_\_\_\_

List of alias records for this facility follows:

Record Type: RCRIS System ID: NJD079323044

Facility Name: CELANESE CHEMICAL CO INC

Address: 354 DOREMUS AVE NEWARK, NJ 07105

Record Type: PCS System ID: NJ0117862 Facility Name: HOECHST CELANESE CHEMICAL GROU

Address: 354 DOREMUS AVENUE NEWARK, NJ 071054872

Record Type: AFS System ID: 3401300018

Facility Name: HOECHST CELANESE CHEMICAL GROUP, INC.

Address: 354 DOREMUS AVENUE NEWARK, NJ 07105

SICs: 2869

D&B Number: 079323044

Record Type: AFS System ID: 340130131

Facility Name: HOECHST CELANESE CHEMICAL GROUP, INC.

Address: 354 DOREMUS AVENUE NEWARK, NJ 07105

SICs: 2869

D&B Number: 079323044

Record Type: SSTS System ID: 011558NJ 001

Facility Name: HOECHEST CELANESE Address: 354 DOREMUS AVENUE

NEWARK, NJ 07105

SICs: 2831 2834 3841 5086

Record Type: CERCLIS System ID: NJD079323044

Facility Name: CELANESE CHEM CO INC

Address: 375 DOREMUS AVE NEWARK, NJ 07105

Record Type: NCDB System ID: C02#900062

Facility Name: HOECHST CELANESE CHEMICAL

Address: 354 DOREMUS AVE. NEWARK, NJ 07105

Record Type: NCDB System ID: 102#199608155048 1

Facility Name: HOECHST-CELANESE-CHEMICAL GROUP

Address: 354 DOREMUS AVE NEWARK, NJ 07103

SICs: 2819

11

Record Type: CICIS System ID: 007005H

Facility Name: CELANESE CHEM CO INC

Address: 354 DOREMUS AVE

NEWARK, NJ 07105

SICs: 5169

Record Types PAPS C

System ID: NJD079323044

Facility Name: CELANESE CHEM CO INC

Address: 354 DOREMUS AVE

NEWARK, NJ 07105

Record Type: TRIS System ID: 07105HCHST354D0

Facility Name: HOECHST CELANESE CORP. Address: 354 DOREMUS AVE.

NEWARK, NJ 071054872

SICs: 2869

D&B Number: 079323044

Facility Name: HOECHST CELANESE CHEM GROUP Reporting Year: 1991

Street : 354 DOREMUS AVE.

City : NEWARK State: NJ Zip: 071050000

County : ESSEX EPA ID: NJD079323044

Mailing Address: 354 DOREMUS AVENUE

Mailing City : NEWARK State: NJ Zip: 071050000

Year: 1991 Total Waste Federal Wst. RCRA Waste Tons Generated : 9.15 8.94 8.94 Tons Shipped : 9.15 8.94 8.94

SIC Code(s): 2869

Contact: ANNE M COOGAN-ACEVEDO Phone: 2015892705-3186

Generator Status : Large Quantity Generator (LQG)

Storage Status : No RCRA-permitted or interim status storage

RCRA TDR Status : No on-site TDR; site has no plans to develop system Exempt TDR Status: No on-site TDR; site has no plans to develop system

\_\_\_\_\_\_

List of wastes generated by this facility:

Waste Desc.: RO HAZARDOUS WASTE SUBSTANCE NOS ORME NA918 RECEDITENTO

This is state-only waste (no Federal waste codes).

State waste code(s): X750

Tons Génerated: 0.21

Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

ENSCO INC EL DORADO, AR System type: M042

Tons sent: 0.21 EPA ID: ARD069748192

Waste Desc.: WASTE FLAMMABLE LIQUID NOS UN 1993 METHYL ETHYL KETONE EPA Waste Code(s) for this generated waste-

U159 Butanone (I,T) or Methyl ethyl ketone (MEK) (I.T)

D001 Ignitable waste D035 Methyl ethyl ketone

Tons Generated: 1.46

Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

CYCLE CHEM INC ELIZABETH, NJ System type: M061

Tons sent: 1.46 EPA ID: NJD002200046

Waste Desc.: WASTE FLAMMABLE LIQUID NOS UN 1993 ETHYL ACRYLATE

EPA Waste Code(s) for this generated waste-

D001 Ignitable waste Tons Generated: 0.63

Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

CYCLE CHEM INC ELIZABETH, NJ System type: M061

11

Tons sent: 0.63 EPA ID: NJD002200046

Waste Desc.: WASTE FLAMMABLE LIQUID NOS UN 1993 (D001) VINYL ACETATE EPA Waste Code(s) for this generated wasteD001 Ignitable waste
Tons Generated: 2.71
Tons Generated & Managed On-site: 0.00
This waste was sent off-site toCYCLE CHEM INC

ELIZABETH, NJ
System type: M061

Tons sent: 2.71 EPA ID: NJD002200046

Waste Desc.: RQ HAZARDOUS WASTE, SOLID NOS ORM-E 9189 PARA-FORMALDEHYDE

LOOR SWEEPINGS

EPA Waste Code(s) for this generated waste-U122 Formaldehyde Tons Generated: 0.75 Tons Generated & Managed On-site: 0.00 This waste was sent off-site to-CYCLE CHEM INC ELIZABETH, NJ

ELIZABETH, NJ System type: M043

Tons sent: 0.75 EPA ID: NJD002200046

Waste Desc.: RQ HAZARDOUS WASTE SOLID, NOS: ORM-E, NA9189 PARA

FORMALDEH

YDE

EPA Waste Code(s) for this generated waste-U122: Formaldehyde Tons Generated: 2.20 Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

CYCLE CHEM INC ELIZABETH, NJ System type: M043

Tons sent: 2.20 EPA ID: NJD002200046

Waste Desc.: WASTE PETROLEUM NAPTHA, COMBUSTIBLE LIQUID UN1255 EPA Waste Code(s) for this generated waste-

D001 Ignitable waste
D039 Tetrachloroethylene

D018 Benzene

Tons Generated: 1.19

Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

SAFETY-KLEEN CORP.

NEWARK, NJ

System type: M021

: ;

Tons sent: 1.19 EPA ID: NJD000768093

Office of the General Counsel

Hoechst Celanese Corporation Route 202-206 PO Box 2500 Somerville, NJ 08876-1258 908 231 2000 Telex 833 449 Fax 908 231 2209

OCT 2 1 1996

October 18, 1996 TSM-232-96

#### Via Federal Express

Lance R. Richman, P.G. Emergency and Remedial Response Division United States Environmental Protection Agency 290 Broadway, 19th Floor New York, New York 10007-1866

Re: Diamond Alkali: Superfund Site/Passaic R. Study Area Response to Request for Information Hoechst Celanese Chemical Group Ltd. 354 Doremus Avenue, Newark, New Jersey

Dear Mr. Richman:

This letter transmits Hoechst Celanese Chemical Group Ltd.'s responses to a U.S. Environmental Protection Agency (USEPA) Request for Information dated August 20, 1996. The Request for Information pertains to the USEPA's investigation of potential releases of hazardous substances into the Passaic River.

As instructed, a separate response is provided for each question in the Request for Information. Each answer is preceded with the number of the question to which it is addressed. Where appropriate, supplementary documentation is provided in attachments which follow the responses. The attachment numbers also correspond to the question numbers. The signed Certification of Answers to Request for Information immediately follows this letter.

Please be advised that Hoechst Celanese Chemical Group, Ltd. is still working on completing a few of its responses. We have endeavored to provide complete responses and will supplement the responses as soon as possible.

If you have any questions concerning these responses, please do not hesitate to call me at 908-231-4673.

Sincerely,

HOECHST CELANESE CORPORATION

a Maccano

Tema S. Maccaro

Paralegal

TSM/nbh

Copy to A. Wagner

1)

ACB000024

Hoechst 😉

932500016

constituent concentrations which may have been related to its historical operations. All remaining soil contaminants at the facility are therefore considered to be constituents of historical fill materials which were emplaced prior to CCC's occupancy of the facility. HCCG, Ltd. has proposed to address the historical fill materials within the context of ISRA by applying a Declaration of Environmental Restriction (DER) to the entire site and by implementing limited engineering controls.

#### Attachment 12B: Soil Sampling Results at Test Pit 1 Location

Test Pit 1 (TP-1) was one of numerous test pits completed during the first phase of the ECRA investigation in 1988 (see Plate 5). The purpose of TP-1 was to characterize the historical fill materials and to collect samples representing background soil conditions. An area in the south-central portion of Lot 18 (southern portion of the West Farm) was selected for this test pit.

2.0 feet below ground surface (ft. bgs), and at a concentration of 29 ppm in its duplicate samples IPGBs were not detected in the samples collected from IIP-1 at 0.5 and 8.5 ft. o

Jersey's non-residential SCC were defineated vertically and horizontally by completing soil borings around the former location of TP=1. The sampling locations and results are provided on a location map included in Attachment 12B. The figure in Attachment 12B also shows the area that was remediated by excavating the contaminated soil and disposing of the soil at an appropriate off-site facility. This remedial work took place in December 1995.

#### Attachment 12C: Soil Sampling Results in Transformer Area

HCCG, Ltd. has recently conducted soil sampling around a concrete transformer pad as part of its ISRA requirements. The pad previously held three transformers which were owned and maintained by Public Service Electric & Gas (PSE&G). PSE&G removed the transformers in August 1996, as they were no longer needed by the facility. Before their removal, the fluid in the transformers was sampled for PCBs. No PCBs were detected.

The results of the soil samples collected in this area are depicted on a location map included in Attachment 12C.

#### Attachment 12D: Ground Water Sampling Results

Twenty-seven ground water monitoring wells have been installed at the facility as part of the facility's ECRA/ISRA compliance program. The locations of the monitoring wells are shown on Plate 6. Monitoring well sampling episodes were conducted in 1988, 1990, 1991, 1994 and 1995. Sixteen ground water constituents of concern have been identified by the NJDEP as a result of their presence in ground water, surface water (Plum Creek) or soils at the site. Attachment 12D includes all ground water sampling results for the 16 constituents of concern identified by the NJDEP.

#### Attachment 12E: 1989 Surface Water and Sediment Sampling Results

In 1989, seven surface water samples and fifteen sediment samples were collected from selected locations of Plum Creek adjacent to the West Farm portion of the facility in accordance with a NJDEP-approved sampling plan. The surface water samples were analyzed for the full Priority Pollutant List (PP+40), alcohols and formaldehyde. The sediment samples were analyzed for either PP+40, alcohols and formaldehyde, or PP metals and aluminum. The concentrations detected in these samples are presented in Attachment 12E. The Plum Creek sampling locations are shown on Plate 6.

#### Attachment 12F: 1994/1995 Surface Water Sampling Results (1994/1995)

Four surface water sampling events were completed in 1994/1995. The Passaic River was sampled during all four episodes; Plum Creek was sampled during one of the episodes. The sampling locations, methods, and analytical results are summarized in Attachment 12F. This attachment is an excerpt from a report submitted to the NJDEP in June 1996. The Passaic River and Plum Creek sampling locations are shown on Plate 7.

### ATTACHMENT 6A

POTW Effluent Monitoring Data

#### Pesticides:

	East Farm Effluent (ug/l)	West Farm Effluent (ug/l)	Water Supply (ug/l)
Aldrin	<0.1	<0.1	<0.1
Alpha-BHC	<0.1	<0.1	<0.1
Beta-BHC	<0.1	<0.1	<0.1
Gamma-BHC	. <0.1	<0.1	<0.1
Delta-BHC	<0.1	<0.1	<0.1
Chlordane	<0.1	<0.1	<0.1
4,4'-DDT	<0.1	<0.1	<0.1
4,4'-DDE	<0.1	<0.1	<0.1
4,4'-DDD	<0.1	<0.1	<0.1
Dieldrin	<0.1	<0.1	<0.1
Alpha-Endosulfan	<0.1	<0.1	<0.1
Beta-Endosulfan	<0.1	<0.1	<0.1
Endosulfan sulfate	<0.1	<0.1	<0.1
Endrin	<0.1	<0.1	<0.1
Endrin aldehyde	<0.1	<0.1	<0.1
Heptachlor -	<0.1	<0.1	<0.1
Heptachlor epoxide	<0.1	<0.1	<0.1
PCB-1242	<0.1	<0.1	<0.1
PCB-1254	0.2	0.1	<0.1
PCB-1221	<0.1	<0.1	<0.1
PCB-1232	<0.1	<0.1	<0.1
PCB-1248	<0.1	<0.1	<0.1
PCB-1260	<0.1	<0.1	<0.1
PCB-1016	<0.1	<0.1	www.southander
ीं क्र <b>डिंग्स्टि</b>	₹0:1	<0.1	<0.1

# ATTACHMENTS TO RESPONSE TO REQUEST FOR INFORMATION HOECHST CELANESE CHEMICAL GROUP, LTD. NEWARK TERMINAL 354 DOREMUS AVENUE, NEWARK, NEW JERSEY

**VOLUME 2 OF 6** 

October 18, 1996

#### **ATTACHMENT 11**

Documents Relating to the Generation, Purchase, Use, Handling, Hauling and/or Disposal of Hazardous Substances

### DEPARTMENT OF ARKANSAS Department of Poliution Control and Ecology P. O. Box 9583 Little Rock, Arkansas 72219 Telephone 501-562-7444

932500022

ĺ

(Form designed for use on elite (12-pitch) typewriter.) Form Approved, OM8 No. 2050-0039, Expires 9-30-91 UNIFORM HAZARDOUS 1. Generator's US EPA ID No. Manifest Information in the shaded areas is not required by Federal law WASTE MANIFEST 14 19 11 10 10 13 N LJ 10 10 17 19 13 12 13 10 14 Generator's Name and Mailing Address Hoechst-Celanese Chemical Group Newark Terminal, 354 Doremus Ave. Newark Terminal, 3 Newark, NJ 07105 Newark, NJ 1 589-4371 201 C. State Transporter's IO.2 ( A ) (O Transporter 1 Company Name US EPA ID Number Environmental Group, Inc. IN IY ID 19 18 10 17 16 19 19 14 17 7. Transporter 2 Company Name US EPA ID Number F. Transporter's Phone 9. Designated Facility Name and Site Address US EPA ID Number S. State Facility ID SEE OCCU ENSCO INC. AMERICAN OIL ROAD H. Facility's Phone EL DORADO, AR 71730-1957 1A |R |D |0 |6 |9 |7 |4 |8 |1 |9 |2 | 19 |50 11 18 |63-71 73 100 18 11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) Quantity RQ- Waste Hazardous Substance, N.O.S., ORM-E NA9188 જ (PCB) 0 10 12 DIM Additional Descriptions for Materials Listed Applies not of 11a) PCB lean water EMERGENCY, RESPONSE IN Response: Generator personnet name analis COSTACT. TO 2 TOTO: P GOS HIVE MUST appear in counds or gallons, reference of multiply TOTO strengt on it 15. Special Handling Instructions and Additional Information 10 and # 645/2 GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and Arkan-If I am a large quantity generator, restrict that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford. 1/10191 005an 17 Transporter 1 Acknowledgement of Receipt of Materials Printed/Types hame Year 18. Transporter 2 Acknowledgement of Receipt of Materials Signature Printed/Typed Name 19 Discrepancy Indication Space in item 20 Facility Owner or Operator: Certification of receipt of hazardous relaterials covered by this manifest except as noted in If Printed/Typed Name PA Form 8700-22 (Rev. 9-88) Previous edition is obsolete. NOTICE: THE ORIGINAL AND NOT LESS THAN TWO (2) COPIES MUST MOVE WITH THE HAZARDOUS WASTE CHIRAGENT

## HAZARDOUS WASTE MANIFEST (As Required By The Alabama Department of Environmental Management)

. type. (Form designed for use on elite (12-pitch) typewriter.)			Form	Approved, OMB	No. 2050-0039	Expires 9-30-91
UNIFORM HAZARDOUS 1. Generator's US EPA	10 no. 312131014141999	Aanstess	2. Page 1 of /			haded areas by Federal
HOS CH CLANS SE ATTN: Geore				W.		9
354 DOREMUS AVE. NEWARIT, N.J. 07105 4. Generator's Phone (201) 589-2705 5. Transporter ) Company Name 6.			M.	7	(1) All All All All All All All All All Al	
5. Transporter 1 Company Name 6. CHEMICAL WASTS MANAGEMENTS	US EPA ID Numb	or /_ <b>Q</b> _ /	±.		3	THE STATE OF
CHEMICAL WASTE MANAGEMENT. III	US EPA ID Numb	or 0				
9. Designated Facility Name and Site Address 10.	US EPA ID Number	or i				A STATE OF
CHEMICAL WASTE MANAGEMENT, INC.						
Emelle Facility Alabama Highway 17 at Mile Marker 163 Emelle, Alabama 35459	L D 0 0 0 0 6 2 2 2			52-01/2		
11. US DOT Description (Including Proper Shipping Name, Hezard Class, a	nd ID Number)	12. Contai No.		13. Total Quantin	14. Unit MVVo	
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CWM Profile Number	r		1-1-	111		**
						7 <sup>6</sup> 12.
CWM Profile Number		ard Series I	& Hendling	Codea for the		
COND PCB: - out o	e Sommer 4/8		***			
15. Special Handling Instructions and Additional Information	CASSOF	Care C		200		100
State of ORIGEN, NJ.	N CASE OF 1. (604) 987-	0010	PHIL	MAURI	11 Or	1141-
120111012	se Order #:					
16 GENERATOR'S CERTIFICATION: I hereby declare that the contents proper shipping name and are classified, packed, marked, and labeled, according to applicable international and national government regulation.	and are in all respects in pro					
If I am a large quantity generator, I certify that I have a program in place economically practicable and that I have selected the practicable method future threat to human health and the environment, OR, if I am a small q the best waste management method that is available to me and that I c	d of treatment, storage, or dis juantity generator, I have mad	posal curren	ily available	to me which m	inimizes the f	presentand
Printed/Typed Name	Signature	01			Month	Day Year
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Printed/Typed Name	Signature	71 1	1.1.		-Month	Day Year
18.Transporter 2 Acknowledgement of Receipt of Materials	701	0- /1	To any		197	V 17171
Printed/Typed Name	Signature				Month	Day Year
19. Discrepancy Indication Epoce PHILIP MAURO OH MCORE	ρ					
20.Facility Owner or Operator: Certification of receipt of hazardous in Printed/Typed Name		manifest exc	cept as not	ted in Item 1	9 Month	Day Year
rimaeu ryso name	Signature				nn unitr	1 - 1 -

# ATTACHMENTS TO RESPONSE TO REQUEST FOR INFORMATION HOECHST CELANESE CHEMICAL GROUP, LTD. NEWARK TERMINAL 354 DOREMUS AVENUE, NEWARK, NEW JERSEY

**VOLUME 3 OF 6** 

October 18, 1996

#### teroffice **Al**emorandum

Sith - Files

GEN 55 (REV.6/74

(Name and Location)... P. N. Aitoro

ceclloh

Solid Waste

January 25, 1982

REFERENCE NO. JKS-030-82

FROM (Name and Location)

J. K. Stafford

UBJECT: PCB-content of Terminal Electrical Equipment (Weeks) NJ

The Dallas Purchasing Department has contacted Public Service Electric and Gas Company concerning compliance with EPA PCB regulations for Public Service supplied electrical equipment. In their attached reply, PSEG states that they fully comply with the regulations.

If you do not have this letter in your files, use this attachment to comply with our documentation requirements.

If you have questions, call me.

JKS/rw
Attachment

cc: R. E. Larsen (w/o attach)

R. H. Maurer

S. A. Davis

(Name and Location)	0 0/6	DATE
R. H. Maurer	Brom-pule	June 30, 1980
M (Name and Location)		REFERENCE NO.
T. R. Shandley		TRS-256-80

PGB Contaminated Transformers

Attached is a letter from Public Service Electric and Gas Company, Irvington, New Jersey that states that PSE&G fully complies with all federal regulations pertaining to transformers that are in-Danny malker. Meorge Rodenha stalled at our Newark, New Jersey Terminal.

rmt Attachment cc: S. H. Warren



Public Service Electric and Gas Company 938 Clinton Avenue Irvington, New Jersey 07111

Phone 201/430-7000

June 12, 1980

Mr. T. R. Shandley, Purchasing Manager Celanese Chemical Company, Incorporated P. O. Box 47320 1250 West Mockingbird Lane Dallas, Texas 75247

Dear Mr. Shandley:

This letter is in response to your letter of May 12, 1980, regarding the possibility of PCB's in transformers located on Celanese Chemical Company property, Newark Marine Terminal, Newark, New Jersey.

Public Service Electric and Gas Company fully complies with all applicable federal regulations as provided for in U.S. Environmental Protection Agency Regulations codified at (40) CFR Part 761 with respect to the aforesaid transformers.

Very truly yours,

T. H. Johnson

T. H. Johnson
Division Manager - Essex
Electric Transmission
and Distribution

By: PliMe Court

EWS:dd

JUN 1 6 1980

Files ( - Newar Term Heez Wask Dipos

#### iteroffice Memoraudum

Name and Location) 2/20/80 H. C. Wilson OM (Name and Location) REFERENCE NO. J. A. Bousquet JAB/57/80

cc:

D. O. Dawson

R. A. Maurer

B. A. Melaas

G. A. Rodenhausen

SUBJECT: Dredging at the Newark Terminal

Just to alert you to a problem, the dock area at the Newark terminal is in need of dredging. Samples of the silt were taken and trace amounts of PCB were founds The economical method of disposal of the dredged material is by ocean dumping. We have Corps of Engineers Permit to dredge the area. However, the EPA has not issued an ocean dumping permit since February, 1979.

The Port of New York and other industries are in the same situation.

We are preparing to submit an application to the EPA to dump the silt in the ocean. We will be meeting in the next two weeks to discuss the plan of action to obtain the permit. It will be difficult and could take a year.

jrp

TO (Name and Location)

R. G. Pongetti, P. W. Sturgis, J. D. Walker

(Name and Location)

J. K. Stafford

REFERENCE NO.

JKS-044-81

SUBJECT: Disposal of Rea contaminated Miguid

Should any PCB contaminated liquid be identified at a terminal location, the Rollins Environmental Services facility in Deer Park, Texas has been approved by the EPA for incineration of PCB's as of March 4, 1981. Contact me should Rollins' services be required. There are specific requirements for handling/shipping of PCB's.

JKS/rw

cc: R. E. Larsen

: 1

R. H. Maurer

# ATTACHMENTS TO RESPONSE TO REQUEST FOR INFORMATION HOECHST CELANESE CHEMICAL GROUP, LTD. NEWARK TERMINAL 354 DOREMUS AVENUE, NEWARK, NEW JERSEY

**VOLUME 4 OF 6** 

October 18, 1996

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DIE NAME FOEGHST COLAMESE CHEMICAL GOLD 354 Doremus Avenue, Hewark, NJ HEWARK TERMINAL	1991 Hazardous Waste Report
EPA ID NO	FORM WASTE GENERATION AND MANAGEMENT
INSTRUCTIONS: Read the detailed instructions beginning on page 13 of	t the 1991 Hazardous Waste Report booklet before completing this form.
Sec. NASTE CHEMICAL PROCESS. LIQUID SUMP WATER	), %.O.S.
8. EPA NATUROUS SECOND (N   A   1   1   N   A   1   1   1   1   1   1   1   1   1	C. State Nazardona wasse conse Page 18  [N[A]         N[A]
D. SC code	2. Point of measurement   H. Form code   Page 17   Page
J. Percensed TPI constitutions Page 18  12)  X. CAS numbers Page 18  1.2.1  2. [N   A   1   1   1   1   1   1   1   1   1	. N.A
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EPA 10 NO	FORM	WASTE GENERATION AND MANAGEMENT
INSTRUCTIONS: Feed the detailed instructions beginning on page 13 or	the 1991 Hazardous t	Waste Report booker before completing this form.
Soc. ROU HAVARDOUS &ASHE SCHSTANIC	E. ಞ.⊕.S., OR	ME NA9188
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of 12

Page 4

Comments:



STATE OF ARKANSAS

Oepartment of Pollution Control and Ecology P. O. Box 9583 Little Rock, Arkansas 72219

Telephone 50	1-562-7444		<b></b>	n nagaran. Tagaran	er Barrier	
orint or type. (Form designed to	or use on elite (12-pitch) typewrit	ter.)		Form Approve	d. OMB No. 2050-	0039 Expires 9-30-
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Generator's Name and Mailing Address						100
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ransporter 2 Company Name	Group, Inc. IN	1Y 1D 19 18 10 17 16 19 US EPA 1D NUM		E. State Tracace	207	
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GENERATOR'S CERTIFICATION: I packed, marked, and labeled, and are in a sas state regulations.  If am a large quantity generator, I certifiticable and that I have selected the practine environment; OR, If I am a small quayauable to me and that I can afford.	al respects in proper condition for tra r that I have a program in place to red icable method of treatment, storage,	nsport by highway according to a uce the volume and toxicity of wa or disposal currently available to d faith effort to minimize my was	applicable interrests to me which minis	national and national of the degree that mizes the present	onal government regions de determined to be tand fotore threat to est waste managem	urations and Artan- economically prac- bruman neath and ent method that is
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## ATTACHMENTS TO RESPONSE TO REQUEST FOR INFORMATION HOECHST CELANESE CHEMICAL GROUP, LTD. NEWARK TERMINAL 354 DOREMUS AVENUE, NEWARK, NEW JERSEY

**VOLUME 5 OF 6** 

October 18, 1996

**** 1992 **** H	AZARDOUS WASTE SHIPMENTS **** 1992 ****
SHIPMENT #	9216
DATE	09/14/92
MANIFEST #	CWMA488429
ACCUMULATION DATE	04/04/92
WASTE	RQ HAZARDOUS SUBSTANCE SOLID, NOS,
QUANTITY	1DRUM, 1210 K
TRANSPORTER	CHEMICAL WASTE MANAGEMENT
FACILITY	CHEMICAL WASTE MANAGEMENT
METHOD OF DISPOSAL	INCINERATION
LISTED WASTE	PCB
PROFILE #	. AR1330
DISCREPANCIES	

**** 1992 **** H	AZARDOUS WASTE SHIPMENTS **** 1992 ****
SHIPMENT #	9217
DATE	10/26/92
MANIFEST #	NJA1361360
ACCUMULATION DATE	09/04/92
WASTE	WASTE COMBUSTIBLE LIQUID, NOS, MINERAL SPIRITS,NA1993
QUANTITY	3 DRUMS, 217 LBS
TRANSPORTER	SAFETY KLEEN CORP.
FACILITY	SAFETY KLEEN CORP.
METHOD OF DISPOSAL	RECYCLING
LISTED WASTE	D001, D018, D039
PROFILE #	
DISCREPANCIES	

&GEORGE\HAZ.92

NPRO	TEL No.609-75		Dec 27,95 12:14 No.004 P	.0
DEC-22-1995 12		•	TO 7531327 P.00	
	PCB DATA ANAL	Y818 SHEET	SAMPLE NO.	
Lab Name: 21ST CE	ENTURY ENVIRONMENTAL	Contract:	1A	٠
Project No.:	Site:	Location:	Group:	
Matrix: (soll/water)	SOIL	<del></del> :	Lab Sample ID: C5729	
Sample wt/vol:	10 (g/mL) c	_	Lab File ID: A05872	
Level: (low/med)	LOW	•	Date Received: 12/18/95	
% Moleture:28		Y/N);N		
Concentrated Extract	•	•	Date Analyzed: 12/22/95	
njedlon Volume:	2.0 (uL)		Dilution Factor: 1	
SPC Cleanup; (Y/N)	N	pH;		
		.,	•	
CAS No.	Compound .	MDL .	Result ug/Kg Q	
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	AROCHORI(242)	340	· · · · · · · · · · · · · · · · · · ·	
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DEC-22-1995 12	2:40 FROM	7	מ	<b>75313</b> 27	P.14
·.	PCB DATA ANAL	YBIS GHEET 1B	:	SAMPLE	NO.
Lab Name: 21ST CE	INTURY ENVIRONMENTAL	Contract:		2A	
Project No.1		Location:		Group:	
Matric (soll/water)	9OIL	• •	Lab Sample ID:	C5730	
Sample wt/vol:	10 (g/mL) g	:	Lab File 10:	A05873	
Level: (low/med)	LOW	•	Date Received:	12/18/95	
% Moisture; 17	decamed: (	Y/N): N	Date Extracted:	12/20/95	
	Volume: 10 (ml)	•	Date Analyzed:	12/22/95	
Injection Volume:	2.0 (uL)		Dilution Factor:	1	
GPC Cleanup: (Y/N)	N	pH:			
CAS No.	Compound	MDL:	Result <u>vo/Kg</u>	Q	
	AROCUORHOIS	800		U	
.:	_AROCLOR 1221	300		U	
	AROCLOR 1232	800		U	•
	_AROCLOR 1242	300		U	
	AROCLORH218	300		U	

J=Detected below method detection limit

U=Not Detected

2/90

ACB001520

932500037

ENPRO	TEL No.609-	753-1327	Dec 27.9	5 12:14 No	.004 P.25
DEC-22-1995	2:44 FROM	,	TO	7531327	P.20
	PCB DATA AN	ALYSIS SHEET		6AMPLE NO	D
Lab Name: 21ST CE	ENTURY ENVIRONMENTAL	Contract:		3Á	
Project No.:	Site:	Location:		Group:	<del></del>
Matrix (soll/water)		;	Lab Sample ID:	C5731	
Sample W/vol:	10 (g/mL) o	:	Lab File ID:	A05874	
Level: (low/med)	LOW	:	Date Received:	12/18/95	
% Molsture:19	decanted:	(Y/N): N	Date Extraoled:	12/20/95	
Concentrated Extract	Volume: 10 (ml)	:	Date Analyzed:	12/22/95	
injection Volume:	(uL)	:	Dilution Factor.	1	
GPC Cleanup: (Y/N)	<u> </u>	pH:	·		
OAS No.	Compound	MDL	Result ug/Kg	Q	
	AROCLORISO (	310		<u> </u>	
	* ATROCHUS; TEPAS	310.		U	
	AROCLORI(212)	310		U	

310

310 310

310

J=Detected below method detection limit

WAROCLORy 242 WAROCLORy 242 WAROCLORY 254

AROCLORI 1260

U=Not Detected

9.000

V

ACB001530

NPRO		-		EL No.609-753	-1327		Dec	27,95	12:14	No.	004	P.35
	1995	12147	FROM	• • • • • • • • • • • • • • • • • • • •		סד			753132	7	P.26	

1 110				•			
DEC-22-1995 121	47 FROM	• • • • • • •		. 7	ď	7531327	P.26
•		PCB DA	ATA ANA	LYSIS SHEET		*AMPL	ENO.
Leb Name: 218T CE	NTURY EN	VIRONME	NTAL	Contract:		4Å	
Project No.:		61	te:	Location:		Group:	
Matrix: (soll/water)	901L			:	Lab Sample	ID: <u>C5732</u>	•
Sample wilvol:	10	(g/mL)	٩	: :	Lab File	ID: A05875	
Levél: (low/med)	LOW				Date Receive	ed: 12/18/95	•
% Moisture: 25		d	ecented:	(Y/N): N	Date Extract	ed: 12/20/95	•
Concentrated Extract	Volume:	10	(ml)	:	Date Analyz	ed: 12/22/95	
Injection Volume:	2.0	_(N)		•	Dilution Fad	lor: 1	
GPC Cleanup: (Y/N)	N	-		pH:			
CAS No.	Compoun	rd		MDL.	Result ug/Kg	_ و	
	<b>AROCHO</b>			330		· U	
	<b>₩ARO</b> CLO	RU221		330		U	
· · · · · · · · · · · · · · · · · · ·	-AROCUO		<u> </u>	380		U	
<del></del>	AROCLO	R4248		350		U	
	كنصاحب وخناوي	R1284		330		<del>- U</del>	
. : <u> </u>	- 3000EQ	7 1247	-			<del></del>	

J=Detected below method detection limit

U=Not Detected

ENPRO		TE	L No.609-7	53~1327	Dec 27.9	5 12:14	No.004 P.	45
	-22-1995 12				TO	7531327		. •
. ,		F	CB DATA AN	LYSIS SHEET		SAMPL	■ NO.	
Leb Na	ne: : 218T CE	NTURY ENVI	CONMENTAL	Contract:		5A ·		
Project !	No.:	_	Site:	Location:		Group:		
Matrix	(soft/water)	SOIL		:	Lab Sample ID:	C5733		
			(g/mL) <u>g</u>		Lab File ID:	A05876		
•	(low/med)			• ,	Date Received:	12/18/95		
•	*		decanted:	(Y/N): N	Date Extracted:	12/20/95		
	tratéd Extract \				Date Analyzed:			
	n Volume:	_		::	Dilution Factor.	1		
GPC CI	ennup: (Y/N)	<u>N</u>		pH:				
•	CAS No.	Compound		MDL ;	Result <u>ug/Kg</u>	Q		
		CAROCLOR		270		U		
		<b>AROCHOR</b>		270		U		
		AROCLOR		270		U		
•		AROCLOR		270		U		
		AROCLOR*		270 270		<del>- U</del>		
٠.		CAROCLOR*		270		Ü		
		- AND	·					

DEC 27 '95 11:44

609 753 1327

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PAGE.045

# ATTACHMENTS TO RESPONSE TO REQUEST FOR INFORMATION HOECHST CELANESE CHEMICAL GROUP, LTD. NEWARK TERMINAL 354 DOREMUS AVENUE, NEWARK, NEW JERSEY

**VOLUME 6 OF 6** 

October 18, 1996

## Comparison of Soil Data to Cleanup Levels Hoechst Celanese Newark Terminal Newark, New Jersey

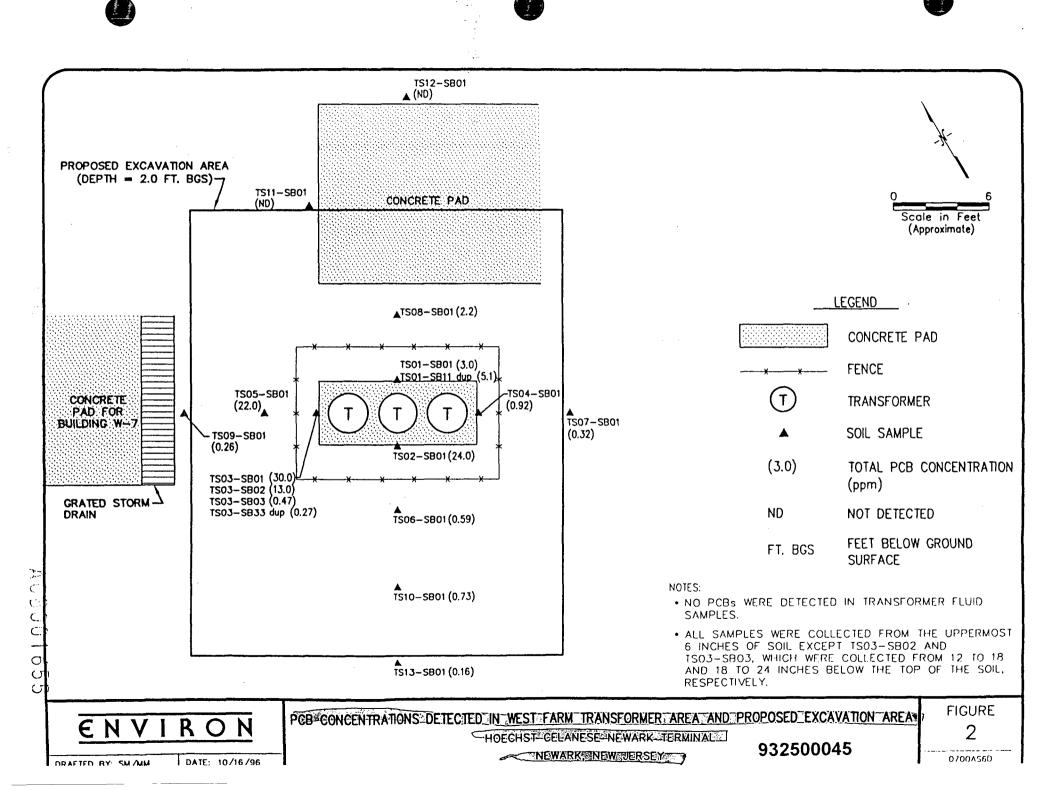
ENVIRON SAMPLE ID MATRIX PHASE DEPTH (feet) COLLECTION DATE	700A-1101-SB01 SOIL Phase 1 0.0-1.0	700A-1101-SB02 SOIL Phase 1 3.0-3.5	700A-1102-SB01 SOIL Phase 1 0.0-1.0	700A-1102-SB02 SOIL Phase 1 3.0-3.5	700A-1103-SB01 SOIL Phase 2 0.0-0-5 05/08/90	700A-1103-SB0: SOII Phase: 3.0-3. 05/08/9
MORGANICO						
INORGANICS —Antimony	ND	ND	ND	5.760		
Arsenic	ND	1.050	4.760	9.380		
Beryllium	ND	ND	ND	1.060*		
Cadmium	ND	ND	1.940*	2.560*		
Chromium	6.540	4.220	17.300	35.400		
Copper	8.720	4.220	17.300 92.400	330,000	104,000	232.00
Lead	8.920	6.540	207.000	846.000°		
Mercury	0.218	ND	0.100	1.680	0.170	0.86
Nickél	8.720	4.220	20.500	34,500		
Selenium	3.260	ND	ND	ND		
Zinc	17.200	8.440	58.300	541.000	223.000	482.00
Petroleum Hydrocarbons SVOCs	1250.000	640.000	990,000	374,000	362.000	337.00
2-Chloronaphthalene	ND	ND	0.067 J	ND	ND	N
2-Methylnaphthalene	2	• • • •			0.095	0.22
Acenaphthene	ND	ND	0.090	0.350 J	ND	0.27
Acenaphthylene	ND	ND	0.110	ND	ND	0.09
Anthracene	ND	ND	0.450	0.370	0.130 J	0.82
Benzo(a)anthracene	ND	ND	1.000*	0.390 J	0.450 J	3.100
Benzo(a)pyrene	0.044 J	ND	1.100*	0.370 J	0.470	2.400
Benzo(b)fluoranthene	0.083 J	ND	1.200*	0.370 J	0.480	2.100 1.40
Benzo(g,h,i)perylene Benzo(k)Iluoranthene	ND	ND	1.300	ND ND	0.440 0.360	1.40
Benzo(k)lluoranthene	ND	ND	ND		0.360 0.690	0.54
Bis(2-ethylhexyl)phthalate	0.073 J	0.088 J	0,270 ND	0.170 J ND	0,090 QN	N.
`Butylbenzylphthalate	ND	ND	1.100	0.540 J	0,480	3.20
Chrysene	0.044 J	ND	1.100 ND	ND .	0.310 B	0.120
Di-n-butylphthalate	ND	ND ND	ND ND	ND ND	O.SIO B	0.64
Dibenz(a,h)anthracene Dibenzoluran	ND	NU	ND	ND	0.085	0.13
Diethylphthalate	ND	ND	ND	ND	ŇĎ	0.08
Pluoranthene	0.058 J	ND ND	1.400	1.300	0.890	4.40
Fluorene	0.036 J ND	ND	0.120	0.320 J	ND	0.39
Hexachlorobenzene	ND	ND	ND	ND	ND	N
Indeno(1,2,3-cd)pyrene	ND	ND	1.100°	ND	0.400	1.30
N-nitrosodiphenylamine (1)	ND	ND	0.100	ND	ND	N
Naphthalene	ND	ND	0.210	1.300	0.190	0.3
Phenanthrene	ND	ND	0.970	1.500	0.630	2.7
Pyrene	0.036 J	ND	3.600	0,560	0.740	4.90
PEST/PCBs	0.000					•
Aroctoral 254	ND	ND	1.300	0.330		
CYANIDES						
Cyanide	ND	ND	ND	0.302		
PHENOLS	0,700	0.880	2.800	0.580		

#### Comparison of Soil Data to Cleanup Levels Hoechst Celanese Newark Terminal Newark, New Jersey

MW Borings  ENVIRON SAMPLE ID  ANTRE  PERSON  COLLECTION USER	700A-MW06-SB01 SOIL Phase I 0.0-0.5	700A-MW06-SB02 SOIL Phase I 2.0-2.3	700A-MW07-SB01 SOIL Phase I 1.5-2.0	700A-MW07-SB02 Pbase I 3.0-3.5	700A-MW07-SB03 SOIL Phase I 7.0-7-5	700A-MW08-SB01 SOIL Phase 0.0-0.
VOCs 1,1,2,2-Tetrachloroethane Benzene Chlorobenzene Ethylbenzene Methylene chloride Toluene Trichloroethene	ND ND ND ND 0.007 B 0.004 J ND	ND ND ND ND 0.006 B 0.002 J ND	ND ND ND ND 0.805 ND ND	ND ND ND ND 0.804 ND ND		ND ND ND 0.220 ND
PEST/PCBs 4,4-DDB 4,4-DDE 4,4-DDT Aroclor.1260 Dieldrin				6 Ju.	,	0.190 0.190 0.540 NE NE
Endosulfan Sulfate G-bhc (Lindane) Hentachlor Enovide	ND	ND	ND	13.600		NI 1.80
FORMAL DESTYDE ACETATES N-Butyl Acetate ACRYLATES	ND ND	ND ND	ND ND	ND ND		
Methyl Acrylate ALCOHOLS Methanol CYANIDES	ND	ND	ND	ND		1.10
Cyanide PHENOLS PHENYL/ETHERS 1,1-Biphenyl Phenyl ether						1.10 Ni

#### Comparison of Soil Data to Cleanup Levels Hoechst Celanese Newark Terminal Newark, New Jersey

Borings						
ENVIRON SAMPLE ID	700A-MW08-SB02	700A-MW09-SB01	700A-MW09-SB02	700A-MW10-SB01	700A-MW10-SB02	700A-MW10-SB03 SOIL Phase I 10.0-10.5
COLLECTION DATE	Phase J	Phis.J	Phase T 5.0-5.5	PRESI	Phase 1 5.0-5.3	16.6.18.3
VOCs						
1,1,2,2-Tetrachloroethane	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
Benzene Chlorobenzene	ND	ND ND	ND	ND ND	ND ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND ND ND ND ND
Methylene chloride	0.002 J	0.002 J	ND	0.005	ND	ND
Toluene	ND	ND	ND	ND	ND	ND
Trichloroethene	NĎ	ND	ND	ND	ND	ND
PEST/PCBs 4,4-DDD			h men			0.4600
4,4-DDD	0.690	ND	ND ND	ND ND ND	ND ND	0.460P 0.290P
4,4-DDE 4,4-DDT	ND 0.240	ND ND	ND ND	ND ND	ND	ND
Aroclor_1260_	ND-	1.600*	ND ND	ND-	2:100*	1.500
Dieldrin	ND	ND	0.180	ND	ND	ND
Endosulfan Sulfate	•					
G-bhc (Lindane)	ND ND	0.190	ND	ND	ND	ND
Heptachlor Epoxidé						A 75%
FORMALDEHYDE	2.400	ND	ND	2.300	2.500	ND
ACETATES						
N-Butyl Acetate						
ACRYLATES Methyl Acrylate						
ALCOHOLS						
Methanol						
CYANIDES						4 000
Cyanide	0.320	0.540	1.070	ND	0.470	2.000 2.100
PHENOLS	1.600	ND	3.700	ND	3.000	2.100
PHENYL/ETHERS						
1,1-Biphenyl						
Phenyl ethér						•



# Hoechst Celanese Newark Terminal ISRA Case No. 86973

				MW25			
	WELL DATE SAMPLE PHASE	MW25 05/25/90 MW25-GW02 Phase 2	MW25 10/24/91 MW25-GW04 Phase 3	MW25 12/04/95 MW25-GW08 Post-Phase 3			er et
The second section of the second	CALIFORNIA CHIEF CONTROL CONTR	rative 2	I Mase 3	1021-11026.)			
	ACETATES Leobutyl Acetate	ND		ND			
	ACIDS	•					
	Formic Acid	ND	ND	ND			
	ALCOHOLS	*					
	1-Butanol	ND		ND			
	1-Propenol	ND		ND			
	2-Butanol	ND	*	ND			
	Methanol	ND	ND	ND	•		
	CYANIDE	•					
	Total Cyanide		•	10			
	ALDEHYDES						
	Formaldehyde	, ND	ND	ND			
	PCBs			•			
	Arcclor-1016			NÐ			
	Aroclor-1221			ND			
	Aroclor-1232			ND			
	Aroclor-1242			ND			
	Aroclor-1248	THE THE THE THE THE THE THE	W. DE. C. M. W. C. S. D. W. W.	2.40 EX			
	Aroclor-1254		PROCESSES AND ASSESSMENT OF STREET AND ASSESSMENT ASSESSMENT AND ASSESSMENT AND ASSESSMENT ASSESSMENT ASSESSMENT AND ASSESSMENT ASSESSM	ND			•
	Aroclor-1260	•		ND	ı	•	
	Total PCBs			2.40		•	
	SVOCs			•			
$\triangleright$	Naphthalene	0.90	ND	ND			
0	Phenol	ND	,	ND			
$\Theta$	VOCs						
$\bigcirc$	Benzene	ND	ND	ND			
	Chlorobenzene	ND	ND	ND			
	Ethylbenzene	ND	ND	ND			
	Methylene Chloride	ND	ND	ND			
0	Toluene	ND	ND	ND			
တ			- · ·				
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Notes:

Units are µg/L

EX - Exceeds NJ Ground Water Quality Criterion
J - Estimated Concentration Below Detection Limit

Hoechst Celanese Newark Terminal, Newark, NJ

ECRA Case No. 86973

Table II-9: Compilation of Detected PCBs

Sample	Compound	Conc. (ppb)
	SOIL SAMPLES	
700A-1102-SB01 700A-1102-SB02 700A-MW09-SB01 700A-MW10-SB02 700A-MW10-SB03 700A-TP01-SB02 700A-TP01-SB12	Aroctor 1254 Aroctor 1260 Aroctor 1260 Aroctor 1260 Aroctor 1254 Aroctor 1254	330 1600 2400 1500 54000
	PLUM CREEK SEDIMENT SAMPLES	
700A-4004-SD01	Aroclor-1260	3200
700A-4006-SD01 700A-4007-SD01	Aroctor 1260	9200
	PLUM CREEK SURFACE WATER SAMPLES	1
700A-4004-SW01	Aroclor-1221	15

0986g

Elan Chemical Company. Inc.

01131-A DIRECT #2 C1/29/73

# PICC SPECIALTY PRODUCTS PACOUCT/CUSTCHER SALES REPORT

FOR DEC 1972 PAGE 150

-IN THEUSANDS OF FOUNDS AND EQULARS-									; <b>-</b>					-	İ				
		NAME OF PRODUCT/CUSTOMER	POIEFMIL	44.1 VI 44 9715	IORCIMA	54163 CURR. 417	JAN.	FEB.	MAR.	APR.	MAY	JUNE	AULY	AUG.	SEP1.	OCT.	NOV.	DEC	C(11 12 1
	7	There DidL (2-1)			VF / 0	713											CC3:	CA	1347-245-17
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	٠.	E I DU POAT DE NEK TÜRANDA PA		-600				•			ŀ			t	l	!	'		10.123771
1	: 7	TE IT LUT FORT DE NE KICHFLAU VA		12.3															10024.71
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		.EAST CUAST TERML NILPINUTUR AC		5.40			1	· .					ŀ	ł	1		1	l	05234111
1 1	: 1	JEASTMAT KODAKTOO ROCHESTER KY		1.00											1				10121125
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7:1	- 7	ABINYE COMP BATCH ROUGE EA GEAUTTIKAETEORPIKALAMAZOOMRICHTI		2.71			<del></del>	l				<b> </b> -			l	<u> </u>			-1015:513
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E	;	TOURNE PAP OF PAZELKULD KC		-:030				<b></b>	<b></b>		<b></b> -	<del> </del>			}	<del> </del>			0.1555
5 21		.FILE CHEAT.ICS THE LIDE NJ		2.00		l	ł	Ì	1		•	i	l	l	i .	1		ŀ	13,21,55
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انخ	از :	PIRESTONE LATEX BIV ARRUN CH		-116	İ		l	<u> </u>					l			l	l		13020124
		ARENT CUST. TUT-FIRESTONE TIRE		15.7															10)26115
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C 111	NAME OF PRODUCT/CUSTOMER	POICIAIN	ICAJ BAJY	FOR CURR	Salis CuRA	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	oci.	NOV.	DEC.	\ 01 ItU3 •3 CF3 P(4:4
	THERMINOL FR-1		SAIES_	_1143	7'0		·									003	50A	1040-245-1
45 Z		1.80		1.80	.600		400			<del></del> -	,			_	:		 	10023963
1131 237	E I CU PUNT DE NE RICHAGAO VA	•900	6.60	-400		1.80	.600	,	3.00		<u></u>		1.40		2.40		3.00	
	PARENT CUST. TUT-E I DU PONT DE	6.00	23.4	6.00	29.0	2.40	4.80	1.53	4.20	4.64	1.20	-60	1.80	1.20	2.40		4.20	10023564
156	.DUVAL SIERRITA SAHUARITA AZ .EAST COAST TERML WILMINGTON NO	10.0	65.4	10.0	97.8	9.6		33.0	18.0		3.60	18.6	18.6					00186945
オッと	- EASTERN DIV LAB HAMDEN CT		1.20		7.70					3.00	3.60							16025001
		-i	1.20	·	1.80												1.80	
1	PARENT CUST. TOT-EASTHAN KODAK C		1.20		1.80										_		1.80	10025125
-  	.ECJLOGY INC CROOKLYN NY . HOWANDS ENG POMPTUN PLAINS NJ		<del></del> -	4	13.2			9.00		1.80	•60	-60		·			1.20	00251356
25 2	CELAN CITE I CAL HERANK HU	-100	.600	.100	-600			.600										00152092
252	TENGELHARD INDUSTRIES HERARK NJ FINYL GORP DATON RUUGE LA	:			3.71			.110	1.80	11	1.80							00117706 10026030
153	TRÁBRÍ KÁU CORP KALANÁZÓD FIÖHT FRANK CREST BAKORIES DEINDIT HI		.600		-1765		,,		-165		12.1	• /• •	THE STATE OF	-100 v	5 1			00164690
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### ORGANIC DIVISION SPECIALTY PROGUCTS PRODUCT/CUSTOMER SALES REPORT

FOR DEC 1971

PAGE 2

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#### ANALYTICAL DATA REPORT

for

ELAN Incorporated 268 Doremus Ave. Newark, NJ 07105

Project: ELAN Inc. Lab Case Number: 10900-636

Date Received: December 11, 1990

CLIENT SAMPLE ID LABORATORY

BAMPLE #

S1

636001

All NJDEP protocol was followed during analysis. This data has been reviewed and accepted by:

Michael H. Leftin, Ph.D. Laboratory Director

# INTEGRATED ANALYTICAL LABORATORIES, INC.

THE PERSON NAMED IN CO.

#### PCB

No.: 10900-636 Lab ID#: 636001 PB1219 Client ID#: **S1** QCBlank Matrix: Soil Soil Dil. Fact.: 71.2 16.8 • Solid: 92.3 100 Units: mg/kg mg/kg Compound Conc. Conc. MDL Conc. MDL

PCB's, total 0.111 1.50 ND 0.351

J Indicates compound concentration below MDL.

ND Indicates compound Not Detected.

B Indicates compound detected in Sample and Blank.



October 2, 1992

Mr. Donald Flores
Stanchart Business Credit, Inc.
477 Madison Avenue, 20th Floor
New York, New York 10022

Re: Phase I Environmental Assessment Elan Chemical Co. Property

268 Doremus Avenue, Newark, New Jersey

Dear Mr. Flores:

ENSR Consulting and Engineering (ENSR) is pleased to subnit its Phase I Environmental Assessment of the above referenced facility. This evaluation was performed pursuant to ENSR's written proposal dated September 10, 1992, which was approved by you the same day. We understand this assessment was requested to provide you with information to assist in your decision regarding the issuance of a credit extension to Elan Chemical Co.

The details of the scope of the investigative effort are provided in Exhibit A. The following paragraphs summarize our inial findings provide recommendations regarding the need for future investigative activities, and discuss study limitations.

#### Site Location and Description.

The subject site consists of this parcels (Lots 8, 9, and 20 of Bock 5014) which contain a main manufacturing building win attached offices, and ancillar rooms, and two other significant structures used for varehousing and other production activities. These parcels of land are situated on Doremus Avenue in an industrialized section of Newark, NJ.

#### Site History

The main parcel (Lot 8) was dveloped of to the late 1920s a a vegetable oil plant. Sometime prior to the late 1940sind containing through the 1960s, the site was used under several names for the manufactung of principle and a variety of sealings and coatings. Based on a review of industrial directoris and find transcemaps, Elan Chemical Co. began using the main parcel in 1971. In 1977Lot 20, life and right-or-way, was sold to Elan Chemical Co. by the Central Railroad of lew Jethan Railroad tracks and the elevated fill were removed from this parcel and Ela began transcent area for storage.

AEA001295

ENSR Consulting and Engineering

One Executive Drive

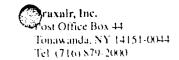
Somerset, NJ 08873 (908) 560-7323 (908) 560-1688/FAX

Somerset Executive Square 1

	If "Yes", was each rele the state emergen documentation]?					
	Yes	No				
7. <u>PC</u>	B Containing Items/Ed	uipment i				
(a) <sub>C</sub>	List major PCB items equipment, etc.) and copy of supporting a	check-conce	ntration categ	ory of each li		
	Item	<50 ppm	50-500 ppm	>500 ppm	Unknown	
	Transformers	X*				
* Accord	ding to Elan, they have be.	een told by P	SE&G, the elect	rical utility, tha	it the transforr	ners are
	Are all PCB items w marked?	ith PCB cond	centration leve	ls at or abou	ve 50 ppm p	properly
	Ýes !	No				
	If "No" to Question 6	(b) above, de	scribe:			
(c)	Are there any signs o	leakage or s	staining around	I the PCB equ	uipment?	
(d)	Are inspections condu	icted of the F	CB equipment	?		
(e)	What is the frequency	of the inspec	ctions?			
<b>(f)</b>	What is the minimum	nterval betwe	een the inspect	ions?		·
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Union Carbide





May 5, 1993

Joseph Goliszewski, Case Manager New Jersey Department of Environmental Protection and Energy Division of Responsible Party Site Remediation Bureau of Env. Evaluation and Cleanup Responsibility Assessment CN 028 Trenton, New Jersey 08625-0028

RE: Linde Gases of The Mid-Atlantic, Inc. (union carbide)

Newark, New Jersey Facility ECRA Case No. 90254

Dear Mr. Goliszewski:

This letter will summarize, as you requested, the conclusions reached at our meeting on April 19, 1993. Those in attendance were Lois Arbegast, David Haymes, Stephen Mayberry, Kris Geller, Paul Dimakos, Suzanne Blanchard, Nelson Luzzetti, and the two of us. The following items were discussed and agreed upon:

ITEM 1.

The elevated levels of priority pollutant metals (Metals) in the areas of concern (AOC) at the referenced facility are inherent in the fill material underlying the developed areas of the facility property and not indicative of operations at the Newark facility. This conclusion is made from the analytical results and observations of on-site fill material made by IT Corporation and from historic documents regarding the property.

According to historic site drawings, the fill material used at the property is composed of blast furnace slag from steel-making operations. This blast furnace slag contains measurable amounts of total chromium. However, in contrast with other fill materials which contain chromium, such as slag from chromium processing operations, blast furnace slag is unlikely to contain detectable levels of hexavalent chromium. As I explained at the meeting, the consistently high operating temperatures involved in steel making make the presence of the higher valence implausible. In fact, hexavalent chromium was not detected in the sample taken by IT Corporation containing 1600 ppm total chromium.

ITEM 2.

The entire area filled with the blast furnace slag is covered by approximately two feet of clean gravel, thus concerns regarding exposure to chromium by ingestion or contact with the material are negligible. The blast furnace slag is found only under and adjacent to the buildings on the northern end of the property, and not in the "Lime Pond" area located in the southern portion of the property.

ITEM 3.

IT Corporation and Praxair, Inc. have agreed to incorporate the research on blast furnace slag and chromium in the final comprehensive investigation report.

ITEM 4.

The results of the five random samples taken in the "Lime Pond" area showed copper and lead levels above non-residential standards in two of the samples. These metals are not process-related, but again stem from historic fill material, namely soil removed from construction sites in the area. Various acceptable caps for the area were discussed, including gravel and soil plus grass.

Praxair agreed to provide further delineation of the extent of the fill material in the "Lime Pond" area with its final comprehensive investigation report. Praxair will undertake further delineation of the levels of Metals in this fill, and it will consider appropriate institutional control options. Further groundwater monitoring is not required, as Metals do not appear to be a groundwater concern in this area.

ITEM 5.

Praxair agreed to continue work in the former cylinder stripping station area to reach a compliance level for lead, removing contaminated soil and taking confirmatory post-excavation samples for lead analysis only in accordance with NJDEPE technical requirements. No further groundwater monitoring will be required at this location.

ITEM 6.

Total RCBs were measured in the "Neustonmer" area at 118 ppin.

Because this exceeds residential standards, but not non-residential

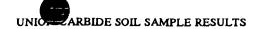
standards, this information would have to be incorporated into any
deed restriction.

ITEM 7.

Praxair agreed to provide a drawing showing the extent of the 1986 excavation around the former 8,000 gallon underground storage tank directly to the west of the cylinder stripping area.

ITEM 8.

The paint storage room was remediated by sandblasting and sampled in accordance with NJDEPE procedures and requires no further action.



	POLE						
SAMPLE ID#	TRANS	NT-1	NT-2	NT-3	OT-1	OT-2	ОТ-3
DATE COLLECTED	11/20/91	11/20/91	11/20/91	11/20/91	11/20/91	11/20/91	11/20/91
Polychlorinated Biphenyls (ppm)  Arochlor 1254	<del>-0.44</del>	0.57-	<del>0.3</del> 1-	11	1.2	1.8-	1-1-

				CENT						FIELD	STAINED	FIELD
SAMPLE ID#	WOPE-1	WOPE-2	WOPE-3	PUMP	SCSS-1	SCSS-2	SCSS-3	SCSS-4	SCSS-5	BLANK	XTERIOR	BLANK
DATE COLLECTED	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91	11/20/91	11/20/91
Priority Pollutant Metals (ppm)												
Antimony	ND	ND	2.5	ND	11	ND	ND	3.4	15	ND	ND	ND
Arsenic	6	24	ND	ND	6.4	2	ND	1.1	ND	ND	ND	ND
Berylium	2	0.99	ND	0.68	1.6	1.2	1.1	1.2	0.83	ND	0.65	ND
Cadmium	1.4	ND	0.95	2.03	9.4	2.2	2.1	4.4	3.9	ND	1	ND
Chromium	1200	840	810	52	910	940	320	870	140	ND	140	ND
Copper	48	31	84	78	370	84	88	380	760	ND	55	ND
Lead	110	160	180	41	2200	650	340	1400	3700	ND	. 110	ND
Mercury	0.2	0.15	0.24-1.3	0.4	2.9-7.2	0.77	1.9	2.1	15	ND	0.14-0.44	ND
Nickel	130	17	19	43	99	120	42	120	48	ND	26	ND
Selenium	ND	1.2	0.87	ND	ND							
Silver	1.7	ND	ND	1.2	5.8	2.3	1.9	3.4	3	ND	1.6	ND
Thallium	ND	ND										
Zinc	110	26	180	360	1400	230	220	550	890	ND	130	0.043

				CENT	BOILER	FIELD	STAINED	FIELD
SAMPLE ID#	WOPE-1	WOPE-2	WOPE-3	PUMP	BLWDN	BLANK	XTERIOR	BLANK
DATE COLLECTED	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91	11/19/91	11/20/91	11/20/91
Base Neutral Organics (ppb)								
Benzo(a)anthracene	1100	460	640	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	1200	620	1000	ND	ND	ND	ND	ND
Benzo(a)pyrene	720	ND	430	ND	ND	ND	ND	ND
Chrysene	880	550	840	ИD	ДN	ND	ИD	ND
Di-n-octyl phthalate	ND	620	ND	ND	ND	ND	ND	ND
Fluoranthene	1100	430	540	ND	ND	ND	ND	ND
Phenanthrene	990	ND	430	ND	ND	ND	ND	ND
Pyrene	2000	820	1100	ND	ND	ND	390	ND
Total Base Neutral Organics	7990	3500	4980	ND	ND	ND	390	ND
Tentatively Identified B/N Organics	15740	7200	12340	5060	19080	6	7960	700



## State of New Jersey Department of Environmental Protection and Energy

Division of Responsible Party Site Remediation CN 028 Trenton, NJ 08625-0028

Scott A. Weiner Commissioner

Karl J. Delaney Director

JAN 27 1993

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
N. A. DIFFANCO

N. A. Difranco Praxair, Inc. Industrial Ave. P. O. Box 237 Keasbey, NJ 08832

RE: Administrative Consent Order (ACO) In the Matter of Linde Gases of the Mid-Atlantic, Inc. (Linde ACO)
360 Ave. P, Newark City, Essex County
ECRA Case # 90254

Dear Mr. DiFranco:

This is to advise you that the New Jersey Department of Environmental Protection and Energy (NJDEPE) has completed a review of the Remedial Investigation Report dated September 30, 1992. Based on the review, the proposal for no further action is unacceptable.

The proposed cleanup standard rules appeared in the February 3, 1992 New Jersey Register. These shall be used as guidance to determine: what concentration of contaminants need to be present at a site to consider the site contaminated; which areas of environmental concern need additional investigation; and the concentration of a contaminant allowed to remain for a site to be considered "clean".

When the person responsible for conducting a cleanup agrees to remediate a contaminated site consistent with the proposed cleanup standards, no further discussion on the identification of cleanup standards will be necessary. It must be remembered, however, that upon adoption, or at any time thereafter, if the cleanup standard for a given contaminant is revised, then remediation to achieve that adopted cleanup standard may be required.

If the person responsible for conducting a cleanup does not agree to remediate a contaminated site consistent with the proposed cleanup standards, then the NJDEPE cannot require compliance with the proposed standards at this time. In these circumstances, the responsible party shall submit a proposal to the NJDEPE that details the site specific circumstances and technical rationale for proposed cleanup goals on a case-by-case basis.

Pursuant to N.J.A.C. 7:26B-4.3(b), and the ACO, Linde shall perform the following actions.

Information regarding the source of the chromium shall be submitted. If the chrome source is unknown, identification of the chrome ion is required.

5. Exterior Staining at Generator Room

Chromium at a concentration of 140 ppm was the only contaminant found in the soil sample collected from this area.

Linde proposes NFA.

This is conditionally acceptable. Information regarding the source of the chromium shall be submitted. If the source is unknown, identification of the chrome ion is required. Based on this information further remediation may be necessary.

6. Buried Cylinders Near Lime Pond Area

Five samples were collected in order to characterize the fill in this area. Sample parameters were PP+40. Analyses indicate elevated levels of PP Metals: Sb (ND to 9.9 ppm), As (3.2 to 17 ppm), Be (ND to 0.79 ppm), Cd (0.61 to 14 ppm), Cr (17 to 520 ppm), Cu (44 to 970 ppm), Pb (240 to 3000 ppm), Hg (ND to 7.4 ppm), Ni (24 to 310 ppm), Ag (ND to 19 ppm), Zn (140 to 1800 ppm).

As, Cd, Cr, Cu, Pb, and Zn are above the current cleanup guidance levels. In addition, various CaPAHs were detected above current soil cleanup guidance.

Linde proposes NFA.

This is unacceptable. Only sample LP-4 did not contain high levels of metals. Delineation is required in this area. Remediation may be required. Sample parameters for delineation and/or post-excavation sampling shall be PP Metals.

7. Former 8000 Gal. # 2 Fuel Oil UST

The area to the east of the former UST was excavated due to elevated TPHC found in soil samples collected from test pits. Post-excavation samples were collected to the north, south and east of the excavation. Samples were analyzed for TPHC. Sample FOPE-3A contained 2200 ppm TPHC and was analyzed for VO+15.

Linde proposes NFA.

This is conditionally acceptable. The report states that all other contaminated soil associated with the former UST was removed during the tank excavation in 1986. A map showing the limits of this excavation and any sample locations shall be provided. If this information is not available, sampling to the north, south and west of the tank shall be required. Sample parameters shall be TPHC with any samples containing greater than 1000 ppm TPHC additionally analyzed for VO+15. Sample depth shall be 0-6" below the former tank invert.

#### 8. Transformers

Pive soil samples were collected from this area. The highest hit contained 1.8 ppm PCBs, which is below the current non-residential cleanup guidance level

# AVENUE P LANDFILL INVESTIGATIVE SUMMARY

Historically, the eight acre Avenue P Landfill and adjacent properties have served as an illegal dump. In the early eighties, hundreds of drums were observed on the western portion of the site. Subsequently, an Administrative Consent Order (ACO) was signed with the site's property owner, the Newark Redevelopment and Housing Authority in 1985. A cleanup proceeded thereafter, but was limited to surface drums and contamination. All remedial activities were discontinued in 1987, at the request of the Housing Authority. Groundwater contamination still warrants abatement.

The site is located in the Iron Bound Section of Newark, which contains numerous chemical refineries and industrial facilities. Avenue P and the New Jersey Turnpike bound the site to the east and west respectively. Alliance Chemical Inc. is situated along the site's northern perimeter. Originally the site consisted of Lots 14, 16, 20, 21, 23, 24, and 28 (Block 5020), but is now designated as Lots 14 & 138, (357-405 Avenue P) according to the current tax map. The Newark Redevelopment and Housing Authority refers to the site as disposition parcel 103-9x. Parcel 103-9y borders the site's southern perimeter.

Property lines and ownership have changed frequently over the years. The Amalgamated Dyestuff and Chemical Works Inc., and American Fat and Tallow Co. were two of the first industries in the area. Avenue P was once a dirt road and referred to as Plum Point Lane in the thirties and forties.

The Amalgamated Dyestuff and Chemical Works Inc. occupied the area north of the Landfill which is now owned by Alliance Chemical Inc. (309 -327 Avenue P). The property was conveyed to the Calco Chemical Co. in 1938. American Cyanamid purchased the facility six months later which they sold to Martin Laboratories in 1943. Subsequently, lease's were executed with Tiffany Chemical Company in July, 1946 (building 9, 9A, 11 & 13F), and Security Paint and Varnish in April, 1948 (building 8 & 13A). Both companies manufactured paints, varnishes, lacquers, dyes and oils.

During the fifties, the property was owned by Harry and Sophie Martin (husband and wife) and later by Plum Point Realty, who conveyed Lots 8 (1958) and 12 (1957), Block 5020, to Alliance Color and Chemical Company.

Sun Chemical Corp. purchased Lots 6, 9 and 10 (Block 5020) from Union, Carbide on September 30, 1964. This property was purchased by D&J Trucking in 1974 and also included Lots 120, 122, 126 (Block 5060), which lie east of Avenue P. D&J conveyed all four tracts of land to the Housing Authority on March 17, 1978.

D&J Trucking purchased Lot 16 (Block 5020) which contained 2.904 acres from Emil and Mary Attanasio (husband and wife) in May of 1958. This property was sold by D&J on August 2, 1960 to A. Giordano & Sons, Inc. Additional land Lot 14 (Block 5020) was obtained from Harry B. and Elizabeth Yeskel on July 29, 1960. The Yeskel's had acquired this property in April, 1960 from the Attanasio's. Previous owners of Lot 16 included the City of Newark and Organic Salt and Acid Company.

AVENUE P LANDFILL INVESTIGATIVE SUMMARY PAGE 5

remediate the site and commenced actions on April 29. However, the Housing Authority shut down the project on June 28, 1985 because cleanup funds were exhausted.

Before site operations ceased, approximately 1,460 drums were removed from the creek and its banks. High concentrations of cyanide and sulfides were detected in some of the drums analyzed. Other substances, possessing a very low flash point (less than 80°F) were also detected. Furthermore, polychlorinated biphenyls (PGBs) contamination was detected in the creek. Cavanaugh informed the Housing Authority of these conditions in a letter to Milton Buck dated July 10, 1985. In a effort to secure additional funds for the clean up, the NRHA sought assistance from the Department of Housing and Urban Development.

On August 9, 1985 the NRHA received urban renewal close out funds to help continue financing the cleanup. Consequently, a mailgram was issued to the Cavanaugh Group informing them to resume cleanup operations at the Avenue P site. The Housing Authority requested a projection of costs so that the limited funds could be monitored. By October 7, 1985 site operations had been reduced to a three man crew responsible for site maintenance (i.e. maintain plastic on drums and soil, replace absorbents in the creek).

Cavanaugh suggested several remedial options for subsurface contamination on February 15, 1986. Test holes made throughout the site indicated that the site was once used for industrial waste disposal. Pigments were observed in each test hole excavated on site. Samples obtained from the hole contained metals and volatiles. Subsequently, the Cavanaugh Group proposed to remediate subsurface contamination by trenching. The NRHA approved of this method on March 17, 1986.

In August of 1986, Cavanaugh informed the NRHA that they were proceeding with the development of a remedial plan for ground water. But, the Housing Authority did not authorize this work. By September of 1986, no significant work had been accomplished at the Avenue P site since early March. The NRHA was not in compliance with the originally issued ACO. Approximately three thousand cubic yards of contaminated soil still remained on the premises. This soil was classified by the DWM in June.

In April, 1987 Cavanaugh submitted work plans to the Housing Authority for a leachate collection system. The collection system was previously mentioned in a Remedial Action Feasibility Study and Work Plan dated November 17, 1986. Steel plates were temporarily installed to contain leachate from entering into Plum Point Creek. No actions have been taken to address the leachate problem.

The NRHA ordered the Cavanaugh Group to cease and desist all work at the Avenue P site on July 29, 1987. Only remediation of surface drums and soils was near completion, but hazardous conditions still existed on site.

The New Jersey Turnpike Authority (NJTA) announced a plan in May 1985 to increase the capacity of the Turnpike by widening from Interchange 11 to U.S. Route 46. Louis Berger & Associates, Inc. published a draft report entitled Preliminary Site Investigation: New Jersey Turnpike 1985-90, Widening from Passaic River to Mile Pose 105 for the NJTA in December,

AVENUE P LANDFILL INVESTIGATIVE SUMMARY PAGE 7

#### DISCHARGE/ABANDONMENT INFORMATION:

Avenue P Landfill 357-405 Avenue P City of Newark, Essex County Block 5020; Lots 14 and 138

Current Owner:

Newark Redevelopment and Housing Authority 57 Sussex Street Newark, NJ 07103

#### SUBSTANCES DISCHARGED/ABANDONED:

The following substances have been detected in soil, sediment, surface water and ground water samples obtained from the Avenue P Landfill by the Cavanaugh Group:

Base Neutrals: Anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)flouranthene, chrysene, fluoranthene, flourene, napthalene, phenanthrene, pyrene.

Metals: Antimony, arsenic, beryllium, cadmium, chromium, cyanide, lead, mercury, nickel, selenium, silver, sulfide, zinc.

PCBs: Aroclor 1260

Pesticides: b-BHC, heptaclor

Petroleum Hydrocarbons

Volatile Organics: Acetone, chlorobenzene, 1,1 dichloroethane, 1,1 dichloroethylene, ethylbenzene, methyl isobutyl keytone, naptha, toluene, 1,1,2,2 tetrachloroethane, tetrachloroethylene, trichloroethylene, 1,1,1 trichloroethane, 1,1,2 trichloroethane trimethylsilanoe, xylene.

The Newark Redevelopment and Housing Authority retained the Cavanaugh Group, 19 Route 46, Fairfield, New Jersey to remediate contamination on site. Cavanaugh began mobilization of the site on April 29, 1985.

An emergency drum removal was conducted by Cavanaugh. The drums were staged in containment berms made from fill material taken on site. In June of 1985, twenty seven bore holes were sunk near the staging area. Soil samples were obtained from each boring and noted to contain multicolored (ie. white, red, blue, green, pink, yellow, orange, etc.) materials. Fifteen ground water samples were also collected from the borings. Metals and volatile organics were detected in the ground water and soil samples.

By July, 1985 the Cavanaugh Group had removed approximately 1,460 drums from the creek's banks and bottom. Most of the 55 gallon drums were ruptured.

The contents of some drums analyzed contained low flash points (85 Degrees Fahrenheit), cyanides, corrosives and PCBs.

AVENUE P LANDFILL INVESTIGATIVE SUMMARY PAGE 8

During the drum remediation, soil was excavated from a steep embankment adjacent to the creek on the northwest boundary of the site. The material was stockpiled in two mounds which were sampled on December 9, 1985. Metals, pesticides, CPCBS and volatile organics were detected in four composite samples obtained from each mound.

Upon completion of the drum removal, the containment berms were stockpiled in mounds on site. Petroleum hydrocarbons, cyanide, sulfide, CPCBS and volatiles were detected in composite soil samples collected from these mounds.

A series of samples were collected in April, 1986 and consisted of one surface water sample, one sediment sample, and four composite soil samples. During the sampling episode air monitoring was conducted. Organic vapors ranging from 0-110 ppm were detected. The laboratory detected petroleum hydrocarbons in all six of the samples analyzed. Concentrations of cyanide/sulfide were present in most of the soil samples. These samples were taken about twenty to thirty feet away from the creek. A black charcoal like material and oily substance was found in some of the composite samples.

Cavanaugh submitted a work plan in October, 1986 which investigated ground water and subsurface contamination. The plan called for additional sampling and installation of test pits and monitoring wells throughout the site. Approximately 2,000 drums and 3,000 cubic yards of soil were removed and disposed off site before the NRHA ceased operations in August of 1987. No subsurface contamination has been remediated to date.

AVENUE P LANDFILL INVESTIGATIVE SUMMARY PAGE 18

#### RESPONSIBLE PARTY:

Union Carbide Corporation, Linde Gases of Mid-Atlantic 360 Avenue P Newark, NJ 07105-4802 (201) 589-7435

Parent Corporation:
Union Carbide Chemicals and Plastics Co., Inc.
Union Carbide Corp.
Old Ridgebury Rd.
Danbury, CT 06817

Corporate Status: Active; packages compressed gas, chemicals and allied products

Financial Status: Sales 1988 \$5,252,000,000 Dun & Bradstreet 1990

<u>Principals</u>:
Robert D. Kennedy
Chairman of the Board, Chief Executive Officer, President

AVENUE P LANDFILL INVESTIGATIVE SUMMARY PAGE 22

Alliance manufactured specialty organic intermediates such as dyes, pigments, and diazo compounds. The chemicals 2-chloro-1,4-diethoxy-5-nitro benzene (DEB) 1975-1980, and 5-chloro-2,4-dimethoxyaniline (ITR-amine) 1965-1983, were manufactured at the plant. Both chemicals are listed by the EPA as Class II dioxin compounds which are precursors to dioxin formation.

Alliance makes product by mixing muratic acid, water, and organic chemical reagents in a large vessel. A chemical reaction occurs in which the intermediate is synthesized, then filtered and washed. In the synthesis step, some material is washed free of product and then filtered and washed. Two waste streams are generated from the process: filter cake and acidic process water. The cake is stored in drums and a sludge box at the rear of the facility, adjacent to the landfill (see map in file). Approximately 200 drums were observed in the rear storage area during an inspection conducted by the Division of Waste Management on November 19, 1980. Many of these drums were insecure for hazardous waste storage. In 1980, a sample of Alliance's activated carbon filter cake was analyzed by New York Testing Laboratories Inc. and found to contain cyanide, phenols, ammonia, arsenic, cadmium, chromium, copper, lead, mercury, nickel and selenium.

The process water was once discharged into a trench which led to an unlined neutralization pit. PCBs and volatile organics ie. 1,2 dichloroethane, ethylbenzene, and xylene were detected in sludge samples obtained from the trench. This material was later determined to be hazardous material. Additional samples tested in February and March, 1981 indicated the presence of benzene, trimethybenzenes, napthalene, methylene chloride, momomethyl naphthalenes, chloroform, carbon tetrachloride and 1,1,1 trichloroethane. Similar contaminants ie. PCBs, cyanide, sulfides, lead, mercury and petroleum hydrocarbons were detected in sediment, surface water and soil samples obtained from the sites. A black charcoal like material was present in some of the composite soil samples. Alliance generated an activated carbon filter cake at their plant.

Metals and volatile organics were also detected in soil and ground water samples taken from the Avenue P site. These compounds are similar to those detected in samples collected from Alliance. Drums removed from the site contained cyanide and PCBs.

Aerial photographs (CTK, IRC - 51, 52) taken on August 20, 1972 revealed that an extensive drum storage area existed at the Alliance plant. The drums were located on the south western side of the property. A road was observed entering onto the northwestern portion of the landfill in subsequent aerial photographs (2063-43-5927, 5928, 5929) dated April 11, 1974. This road was not evident in previous aerials and the number of drums on the premises had been significantly reduced. Most of the drums were discovered in the northwest portion of the site.

Pfister Chemical stated in the Industrial Waste Survey that their Avenue P plant, Alliance Chemical, Inc., used D&J Trucking to haul waste off site.

Sun Chemical Corp. (SUN), 185 Foundry Street, Newark manufactures red, magenta and violet quinacridone pigments. The company generates process waste from filter presses and filter cake washes. This material consists mostly of polyphosphoric acid, but may also contain alcohol and glacial

Authority that soils on the site are very acidic. The facility recycled batteries containing sulfuric acid which may have contributed to this type of contamination.

The Avenue P Landfill was briefly owned by the Newark Redevelopment and Housing Authority (NRHA) in the late sixties. In 1974, the NRHA purchased the property to upgrade the site for sale to a prospective developer. An engineering study of the site was prepared by Genge Consultants in 1978. The study indicated that chemical and paint waste were detected in test boring/pits made on the site during the mid seventies. Subsequently, representatives from the Housing Authority and NJDEP discovered hundreds of 55 gallon drums on the northwest portion of the former landfill. The NRHA signed an Administrative Consent Order (ACO) to remediate ground water, surface and subsurface contamination at the site in April, 1985. A contractor was retained but was limited to only performing a cleanup of surface drums and contamination before ceasing operations in 1987. Ground water and subsurface contamination still warrants abatement to date. The Housing Authority has not complied with the ACO they signed in 1985.

Therefore the following entities: A. Giordano & Sons, Inc., Alliance Chemical Inc.; Benjamin Moore & Co., Inc.; Revere Smelting & Refining Corp. of New Jersey; Revere Urban Renewal Corp.; Sun Chemical Co.; The Newark Redevelopment & Housing Authority; the Sherwin Williams Co., Inc.; Union Carbide Corp. have been identified as primary responsible parties who owned, operated or may have had their waste disposed at the site.

American Fat & Tallow Co.; D&J Trucking & Waste Co., Inc.; Forsun Urban Renewal Corp.; Reagent Smelting & Refining Corp. (a New Jersey Corp.); have also been identified as primary responsible parties but are determined to be insolvent.

Aerial photographs reveal that the landfill was operating to some capacity in 1940. The following companies: American Cyanamid Co.; Calco Chemical Co., Inc.; Martin Laboratories, Inc.; the Amalgamated Dyestuff & Chemical Works, Inc.; Security Paint & Varnish Corp.; and Tiffiany Chemical Corp. have been identified as potential responsible parties which operated the industrial facility immediately north of the site. It is probable that they dumped their waste at the former landfill due to the close proximity of the facility. All of these entities with the exception of American Cyanamid, have been determined to be insolvent through Certificates of Incorporation, Dun & Bradstreet Search and various industrial directories.

It is recommended that negotiation be initiated with the identified responsible parties for remediation of site contamination.

Run-off and leachate entering Plum Point Creek represent ongoing discharges. Enforcement actions should be taken against the Housing Authority since they have failed to remediate subsurface contamination outlined in the ACO. It is recommended that sampling be conducted for dioxin forming compounds specifically 2-chloro-1, 4-diethoxy-5-nitro benzene and 5-chloro-2,4-dimethoxyaniline. These products were manufactured by Alliance and may have been disposed at the Avenue P Landfill by D&J Trucking.

D&J Trucking also operated facilities at 310 Avenue P and Avenue A and Pioneer Street in Newark. Both of these sites are documented hazardous

Avenue P Landfill – Newark Redevelopment & Housing Authority – A. Giordano & Sons – American Cyanamid – Revere Smelting & Refining – Revere Urban Renewal



## State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF HAZARDOUS WASTE MANAGEMENT

CN 028 Trenton, N.J. 08625-0028 (609) 633-1408

Fax # (609) 633-1454

### MEMORANDUM

TO:

Debbie Pinto, Acting Chief

Bureau of Planning and Assessment

FROM:

Bruce Venner, Chief

Bureau of Compliance and Technical Services

SUBJECT:

Responsible Party Investigation

Avenue P Landfill, Newark

DATE:

June 20, 1990

The Bureau of Compliance and Technical Services' Special Investigation Section has prepared the attached Responsible Party Investigation Summary for the subject case to assist the Bureau of Planning and Assessment in its site evaluation.

Please be advised that referenced key documents are maintained in this bureau's files. Should you have any questions in this matter, do not hesitate to contact Doug Stuart at (609) 633-0700.

#### BV: lmc

- c D. Stuart, Section Chief, Special Investigation Section
  - Y. Yacoub, Chief, Metro Bureau of Enforcement
  - P. Smith, Investigator, SIS/BCTS

RPIU File

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remediate the site and commenced actions on April 29. However, the Housing Authority shut down the project on June 28, 1985 because cleanup funds were exhausted.

Before site operations ceased, approximately 1,460 drums were removed from the creek and its banks. High concentrations of cyanide and sulfides were detected in some of the drums analyzed. Other substances, possessing a very low flash point (less than 80°F) were also detected. Furthermore, polychlorinated biphenyls (PGBs) contamination was detected in the creek. Cavanaugh informed the Housing Authority of these conditions in a letter to Milton Buck dated July 10, 1985. In a effort to secure additional funds for the clean up, the NRHA sought assistance from the Department of Housing and Urban Development.

On August 9, 1985 the NRHA received urban renewal close out funds to help continue financing the cleanup. Consequently, a mailgram was issued to the Cavanaugh Group informing them to resume cleanup operations at the Avenue P site. The Housing Authority requested a projection of costs so that the limited funds could be monitored. By October 7, 1985 site operations had been reduced to a three man crew responsible for site maintenance (i.e. maintain plastic on drums and soil, replace absorbents in the creek).

Cavanaugh suggested several remedial options for subsurface contamination on February 13, 1986. Test holes made throughout the site indicated that the site was once used for industrial waste disposal. Pigments were observed in each test hole excavated on site. Samples obtained from the hole contained metals and volatiles. Subsequently, the Cavanaugh Group proposed to remediate subsurface contamination by trenching. The NRHA approved of this method on March 17, 1986.

In August of 1986, Cavanaugh informed the NRHA that they were proceeding with the development of a remedial plan for ground water. But, the Housing Authority did not authorize this work. By September of 1986, no significant work had been accomplished at the Avenue P site since early March. The NRHA was not in compliance with the originally issued ACO. Approximately three thousand cubic yards of contaminated soil still remained on the premises. This soil was classified by the DWM in June.

In April, 1987 Cavanaugh submitted work plans to the Housing Authority for a leachate collection system. The collection system was previously mentioned in a Remedial Action Feasibility Study and Work Plan dated November 17, 1986. Steel plates were temporarily installed to contain leachate from entering into Plum Point Creek. No actions have been taken to address the leachate problem.

The NRHA ordered the Cavanaugh Group to cease and desist all work at the Avenue P site on July 29, 1987. Only remediation of surface drums and soils was near completion, but hazardous conditions still existed on site.

The New Jersey Turnpike Authority (NJTA) announced a plan in May 1985 to increase the capacity of the Turnpike by widening from Interchange 11 to U.S. Route 46. Louis Berger & Associates, Inc. published a draft report entitled Preliminary Site Investigation: New Jersey Turnpike 1985-90, Widening from Passaic River to Mile Pose 105 for the NJTA in December,

#### DISCHARGE/ABANDONMENT INFORMATION:

Avenue P Landfill 357-405 Avenue P City of Newark, Essex County Block 5020; Lots 14 and 138

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Newark Redevelopment and Housing Authority 57 Sussex Street
Newark, NJ 07103

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acetic acid depending upon which pigment is being manufactured. Process waste are neutralized with caustic soda in a tank.

SUN stated in the Industrial Waste Survey dated November 18, 1977 that D&J Trucking hauls approximately twenty cubic yards of waste solids from the facility each month. Waste components include barium chloride, sodium chloride and sodium sulfate. The Cavanaugh Group in a letter to the NRHA dated July 10, 1985 indicated that test results recorded high acidic levels at the site. SUN generates a corrosive aqueous waste which has to be neutralized. Prior to 1981 it is unknown how this material was disposed.

Revere Smelting and Refining Corp. (Revere) operated a lead recycling business which lies adjacent to the southern portion of the Avenue P Landfill. The property was owned by Revere Holding Corp. which acquired the land between 1957-1961. The City of Newark issued a Certificate of Occupancy No. 1653 to Revere in March of 1964. Subsequently, Revere was found in violation of the Newark Air Pollution Control Ordinance on five occasions from 1965 through 1968.

The New Jersey Department of Health issued an Administrative Order to Revere on August 15, 1969 for polluting the Passaic River. Revere was also under order by the Passaic Valley Sewerage Commission to cease sulfuric acid discharges into Plum Point Creek. This material was generated from the dismantling of lead batteries. Changes were eventually made to the plant equipment which eliminated the discharge. Battery acid was neutralized with sodium hydroxide in a tank and directed into a holding lagoon which also received overflow from air pollution scrubbers. Aerial photographs taken on March 31, 1971 depict three lagoons at the rear of the facility. Subsequent photographs taken in 1974, showed a road leading onto the landfill from the Revere Plant.

Max Boritzer, President, Revere Smelting & Refining Corp. (a New Jersey Corp.) in an agreement dated April 14, 1970 gave Revere Smelting & Refining Corp. (a Delaware Corp.) consent to use the Revere name. Revere, the Delaware Corp. changed its name to Revere Smelting & Refining Corp. of New Jersey (RSR/NJ) in December, 1971. Howard M. Meyers is the Corporation's President.

On April 20, 1970 Revere Holding Corp. conveyed Lots 20, 21, 24, 28 and 32 to the Housing Authority. This property was acquired by Revere Urban Renewal Corp. on the following day. Howard Meyers is also the president of Revere Urban Renewal Corp. which owned the property until September of 1974, when the land was conveyed back to the Housing Authority.

Revere Smelting & Refining Corp. and Revere Smelting & Refining Corp. of New Jersey are two different entities which occupied the site during the sixties and early seventies. Exploratory excavations made on the southern portion of the site noted coke waste extending from the surface to a depth of 13 feet. Coke is a by product of metal refining such as lead. Concentrations of lead and antimony have been detected in soil samples obtained from the Avenue P site. Both of these materials were reclaimed by the facility. RSR/NJ may have contributed to ground water contamination through leaching of the lagoon's contents. No ground water survey has been conducted at the site. However, the Cavanaugh Group indicated in a letter to the Housing

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FIELD INVESTIGATION TEAM ACTIVITIES AT UNCONTROLLED HAZARDOUS SUBSTANCES FACILITIES — ZONE I

NUS CORPORATION SUPERFUND DIVISION

## SITE SUMMARY AND RECOMMENDATIONS (CONT'D)

Of these properties, the property known as Cavanaugh appears to be included in the Ave. P site (Ref. No. 3). Large quantities of hazardous wastes were found at this site. The areas of concern discovered, were over 1000-buried drums; many containing PCB's, contaminated soils with high cyanidezand sulfide-levels, and drums and leachate in nearby Plum Creek. In April 1985, the NHA was required to remediate the site under a New Jersey Department of Environmental Protection (NJDEP) Administrative Consent Order (ACO). Remedial work at the site was started, but due to contractal problems between NHA and the Cavanaugh firm hired to perform the work, no work has been done at the site since July 1987. Since it is believed that dumping of hazardous waste occurred throughout Avenue P, properties very close to the Avenue P Site may also contain the same hazardous waste (Ref. Nos. 3, 34, 39). Halliburton NUS Environmental Corporation (formerly NUS Corp.) Region 2, FIT conducted a Site Inspection of the nearby D & J Trucking Site (now known as AFA Pallet property) on June 26, 1990. It should be noted that D& J Trucking is reportedly partly responsible for the Avenue P Site (Ref. No. 45). A Site Inspection was also conducted at the B & C Towing Co. property in 1985 by Halliburton NUS Environmental Corp. Region 2, FIT. Results indicated that soil areas were contaminated with various organic and inorganic components (Ref. No. 49).

The Newark Housing Authority Property Site will be considered to encompass all properties owned by the Housing Authority of the City of Newark that are located on Avenue P and are not listed in CERCLIS. These properties include Branch Brook Auto Wreckers, Siegies Corp. and Cambria Peterbilt.

The property known as Cambria Peterbilt is a vacant lot located on the east side of Ave. P, and is bounded by active warehouses. The lot is fenced on three sides and appears to effectively limit access (Ref. No. 2). The Housing Authority of the City of Newark refers to this lot as Cambria Peterbilt due to possible future development plans of the lot by the Cambria Peterbilt Company (Ref. No. 40).

The Siegies Corporation property is an active auto junkyard located on the west side of Ave. P. It is bounded by auto junkyards to the north and south and Plum Creek to the west. The entire lot is covered with a concrete surface layer and is bordered with trailers used to store auto parts (Ref. No. 2).

The Branch Brook Auto Wreckers property is also an active auto junkyard on the westside of Ave P.

The site is bordered by an auto junkyard to the south, a vacant lot to the north, and Plum Creek to the west. The auto junkyard to the south seperates the Branch Brook property from the Siegies Corp., property (Ref. No. 2).

Halliburton NUS Environmental Corporation, Region 2 FIT conducted an on-site reconnaissance of the three properties on July 1, 1991, at which time only one hazardous waste source was identified. Approximately ten to fifteen 55-gallon drums were discovered packed into an abandoned trailer on the Cambria Peterbilt property. The trailer was marked with "dangerous" signs and the name of an

AVENUE P LANDFILL INVESTIGATIVE SUMMARY PAGE 7

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The process water was once discharged into a trench which led to an unlined neutralization pit. PCBs and volatile organics ie: 1,2 dichloroethane; ethylbenzene, and xylene were detected in sludge samples obtained from the trench. This material was later determined to be hazardous material. Additional samples tested in February and March, 1981 indicated the presence of benzene, trimethybenzenes, napthalene, methylene chloride, momomethyl naphthalenes, chloroform, carbon tetrachloride and 1,1,1 trichloroethane. Similar contaminants ie. PCBs, cyanide, sulfides, lead, mercury and petroleum hydrocarbons were detected in sediment, surface water and soil of samples obtained from the site! A black charcoal like material was present in some of the composite soil samples. Alliance generated an activated carbon filter cake at their plant.

Metals and volatile organics were also detected in soil and ground water samples taken from the Avenue P site. These compounds are similar to those detected in samples collected from Alliance. Drums removed from the site contained cyanide and PCBs.

Aerial photographs (CTK, IRC - 51, 52) taken on August 20, 1972 revealed that an extensive drum storage area existed at the Alliance plant. The drums were located on the south western side of the property. A road was observed entering onto the northwestern portion of the landfill in subsequent aerial photographs (2063-43-5927, 5928, 5929) dated April 11, 1974. This road was not evident in previous aerials and the number of drums on the premises had been significantly reduced. Most of the drums were discovered in the northwest portion of the site.

Pfister Chemical stated in the Industrial Waste Survey that their Avenue P plant, Alliance Chemical, Inc., used D&J Trucking to haul waste off site.

Sun Chemical Corp. (SUN), 185 Foundry Street, Newark manufactures red, magenta and violet quinacridone pigments. The company generates process waste from filter presses and filter cake washes. This material consists mostly of polyphosphoric acid, but may also contain alcohol and glacial

CONTROL NO.: DATE:
02-9104-08 7/23/91 1405
DISTRIBUTION:
Newark Housing Anthorny Property
11000 10 10 10 19
BETWEEN: DIA
BILLANDERS, Fishery Bidogest Piv. of Fish, Game, Shell Fisheric 609 748-2020
David Floria
DISCUSSION:
Contacted Div. of Fish Game, Shalltisherses
to obtain information on the lisheries at
The Newark. Bay and surrounding waterways.
Mr Anders informal me that at present
thre is a ban on the sale and consumption
67 Stripped Bass, Blue Crab, and American Fel
Caught in Newark Bay. This ban extends to
il tributeries of Newark Bay such as the
Kill Van Kull, Arthur Will. The entire tidal
portions at The Passaic and Hackensack
Tures have a ban on the sale and
Coinsumption of all tish species, the logal
is charles of PEB's and
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a faith of Manark Rayle wood and
ACTION ITEMS:
- All All A R
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complex are trackich except for the
Passaic which is some what Fresher
022500084 -

Castrol Oils

#1131-A DIFECT #2 C1/25/73

# PHOCUSTICUS TENDERS REPORT

FUR DEC 1971

PAGE 250

	NAME OF PRODUCT/CUSTOMER	POIENNIAL	1231	FUR CIAM	14.65 Cy44	JANL	FEB.	MAR	APR		NAME	JULY	AUG.	SDL	OCL	NOV.	DEC	a const
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11	CISC PES PET			i i												6244	26	9958-503-
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21:1	*HUUSK SUL NEW HAVEN-FT BAYRIN	l	1.00	1	.60c	1.600	l "	l	l	i	ì	l	l	l	ì	l	l	1 10:3677
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01/131-A DIRECT #2 01/12/72

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# ORGANIC DIVISION SPECIALTY PRODUCTS PRODUCT/CUSTOMER SALES REPORT

FOR DEC 1971

PAGE 316

0	3.   1.	<u> </u>	NAME OF PRODUCTY CUSTOMER	POTENTIA	VEAR	IS AND C IALL OUT I	CURE Y-1-7	JAN.	FE3.	ILLAP.	APR.	MAY	SNUT	JULY	AUG.	SEPT.	oct.	NOV.	DEC.	C35 3 / WAY 513 G1
<u>ار</u> ک		E-1	CUCLOR UIST 5060-HI-30L								i							903	35A	1049-480-1
5	7		ATLANTIC VARMISH RICHMOND VA ATLANTIC HER HALL ROLLING POINT DE	19.0	8.10	19.0	.15C							2.03	-150					C0187725
٠	ļi	4	SASE WANDOTTE CARLSTADT NU	5.00	3-00		•75C							500	-250					0023 3.3 00150345
		رزيع إ	REKT_CUST - JOL-JASF_KYANOOTTE	5.00	3.20	5.00	-750	•						<u>. 500</u>	.250					_fccks3os]
	άī 		VALEU INTAH LADI HAHD. YAUCH		100															_10053565
	: 1	1.	FRYE MEG DES HOINE IA GELBAY OF THE FEERINGDALE NU	100	17.4	100	-100 -300		.100				. 300							10009111
			ADDRESTVE ENG SAN CAMLOS CA ************************************	-207	-050 -100	:.200	.100	. 100												10055034
	_ _	P.i.	RENT CUST. TOT-BERTS CO HINNEA	200	-150		-100	-100												_00045525_
ાં — <del>]</del> :-			DEST_UNDIHERS_SINGING_SERGS_PA		-100		150												.150 .300	02273244
Ċ	3,1	4_•	DETOSTA CORPORATION NEWARK N.J. JIONA PRODUCTS SAYREVILLE NJ. DURDE: PEADODY NA	1000	-250	<del></del>	•300 52.0		-15		1.00	•05	•90		28.0	•20	-10	24.0		_10040534 _10016411
ું ၁		4	O A BRIDER & SONS PHILAGEL PA		-120		2.10				-300 -10			-			1.00	1.00		_10012007 _10012053
ļ.	30	<u>ıl .</u>	BOME CHEM WETS SDALE FLA CENTUR CORPORATION CHICAGO ILL	-5CO	-300	.500	-350 -100		.300				-100							10012405
13	1	ii.	CARROLL PROD FARMINGUALS LI NY		-800	<b></b>	- 800 1.05	ļ	-450	-600	<del></del>			-400		-400				10014220
زا	6	4.	CATAPHUTE CORP JACKSON PS			ļ <del></del>	-050 5-00				·	.050			3.80	1.25			<u>-</u>	00115170 10014647
- 1-		-:	CELANISE PLAS DIV NEWARK NJ	<b> </b>	-050															10014775
}.		<u>-þ:</u>	REST CUST. TOT-CELANESE CORP N	<u> </u>	- C50	<b> </b>	5.00								3.80	1.20		<del></del>		<u> </u>
i i	· \$ }	4	ALLEG SOLV CARNEGIE CARREGIERA ALLEG SOLV CARREGIE CORROR PA ALLEG SOLV CARREGIE PITTS PA	_40.0	69.5	40.0	63.7		10.0		1.2	10.0	12.5	3.0				20.0	7.0	00107700 10002555 10002117
ĺ		Ţ.	IT P-T ALLEG SOLV CARN + POUNDS	140.0	60.5	40-0	63.7		10.C		1.2	10-0	12.5	3.0				20.0	7.0	00107709
		<u>.</u> -	AUSCO_SULVENTS_CINCINNATI_CH_	350	2e2	_350	_55.5		21.5			16-0	_5.0		<u> </u>		13.0			10205351
		10	T P-T AMSCO SULVENTS * POUNDS	350	292	350	55-5		21.5		<u> </u>	16.0	5.0	ļ			13.0	· ·	ļ	10005351
	žď	<u>.  </u> _	BUSEALU_SOLVENTS FONAHADDA NY	120	<u>98</u> .0	120	145		ļ			25.5	<u> </u>	<u> </u>	30.0	30.0	39.0	30.0		_1001533%
	-	. Ira	T F-T BUFFALO SOLV BU + POUNDS	120	93.0	120	145					25.C		·	30.0	30.0	30.0	30.0	<u> -</u> -	10012360
	+	+							-	-	-									
25	) 00	908	38									-			 					31.9

D & J Trucking



FIELD INVESTIGATION TEAM ACTIVITIES AT UNCONTROLLED HAZARDOUS SUBSTANCES FACILITIES — ZONE I

NUS CORPORATION SUPERFUND DIVISION

## SITE SUMMARY AND RECOMMENDATIONS (CONT'D)

Of these properties, the property known as Cavanaugh appears to be included in the Ave. P site (Ref. No. 3). Large quantities of hazardous wastes were found at this site. The areas of concern-discovered were over 1000 buried drums many containing. PCB's, contaminated soils with high cyanide and sulfide levels; and drums and leachate in nearby Plum Greek. In April 1985, the NHA was required to remediate the site under a New Jersey Department of Environmental Protection (NJDEP) Administrative Consent Order (ACO). Remedial work at the site was started, but due to contractal problems between NHA and the Cavanaugh firm hired to perform the work, no work has been done at the site since July 1987. Since it is believed that dumping of hazardous waste occurred throughout Avenue P, properties very close to the Avenue P Site may also contain the same hazardous waste (Ref. Nos. 3, 34, 39). Halliburton (NUS Environmental Corporation (formerly NUS Corps) Region 2, sept Conducted a Site Inspection of the nearby D & J Trucking Site (now known as AFA Pallet property) on the CREf. No. 45). A Site Inspection was also conducted at the B & C Towing Co. property in 1985 by Halliburton NUS Environmental Corp. Region 2, FIT. Results indicated that soil areas were contaminated with various organic and inorganic components (Ref. No. 49).

The Newark Housing Authority Property Site will be considered to encompass all properties owned by the Housing Authority of the City of Newark that are located on Avenue P and are not listed in CERCLIS. These properties include Branch Brook Auto Wreckers, Siegies Corp. and Cambria Peterbilt.

The property known as Cambria Peterbilt is a vacant lot located on the east side of Ave. P, and is bounded by active warehouses. The lot is fenced on three sides and appears to effectively limit access (Ref. No. 2). The Housing Authority of the City of Newark refers to this lot as Cambria Peterbilt due to possible future development plans of the lot by the Cambria Peterbilt Company (Ref. No. 40).

The Siegies Corporation property is an active auto junkyard located on the west side of Ave. P. It is bounded by auto junkyards to the north and south and Plum Creek to the west. The entire lot is covered with a concrete surface layer and is bordered with trailers used to store auto parts (Ref. No. 2).

The Branch Brook Auto Wreckers property is also an active auto junkyard on the westside of Ave P.

The site is bordered by an auto junkyard to the south, a vacant lot to the north, and Plum Creek to the west. The auto junkyard to the south seperates the Branch Brook property from the Siegies Corp., property (Ref. No. 2).

Halliburton NUS Environmental Corporation, Region 2 FIT conducted an on-site reconnaissance of the three properties on July 1, 1991, at which time only one hazardous waste source was identified. Approximately ten to fifteen 55-gallon drums were discovered packed into an abandoned trailer on the Cambria Peterbilt property. The trailer was marked with "dangerous" signs and the name of an

Lab Name: S-CUBED Contract: 68-D9-0027

Lab Code: S3 Case No.: 14407 SAS No.: SDG No.: BEZ67

Matrix: (soil/water) WATER Lab Sample ID: BEZ86

Samole wt/vol: 1000 (g/mL) ML Lab File ID: F072403:

\_evei: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. dec. Date Extracted:06/30/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/25/30

GPC Cleanup: (Y/N) N pH: 0.0 Dilution Factor: 1.303

•	CAS NO.	COMPOUND	(ug/L	or	ug/Kg)	UG/L		Q	
į					!		!		•
1	319-84-6	-alpha-BHC			1		0.05	u	
I I	319-85-7	-beta-BHC					0.05		+
!	319-86-8	delta-BHC			!		0.05	Ú	
1	58-89-9	gamma-BHC (Lindan	e)		1		0.05	U	•
	76-44-8				!		0.05	X.	1
ļ	309-00-2	Aldrin			!		0.05!	<b>b</b> .	1
ļ.	1024-57-3	Heptachlor epoxid	е		:		0.05;	U	:
ļ,	959-98-8	Endosulfan I			1		0.05:	U	!
	60-57-1				1 1		0.10;	R .	!
3	72-55-9	4,4'-DDE			•		0.101	U	1
	72-20-8				1		0.10;	XL	
	33213-65-9				1		0.10:		!
	72-54-8				† 1		3.10;		!
		Endosulfan sulfat	е		;		0.10;		1
	50-29-3				!		3.10;	_	<u> </u>
	72-43-5				!		0.50		!
	53494-70-5						0.10		i
-	5103-71-9						0.50		1
!	5103-74-2				į		0.50		:
;	8001-35-2			,	1 350		1.00	-	•
4	3) 2.6:74-11-2						3 <del>2.2</del> 5 <u>0 +</u>		0.00
Н	11104-28-2				;		0.50		
II	11141-16-5				i		0.50	-	
IJ	53469-21-9				;		0.50	_	:fl
H	12672-29-6				i		0.50		
ł	11097-69-1						1.00!		Ŋ
L	11096-82-5	ALOC-OF-12-00			į		1.00		

Lab Name: S-CUBED Contract: 68-D9-0027

COMPOUND

CAS NO.

Lab Code: S3 Case No.: 14407 SAS No.: SDG No.: BEZ67

Matrix: (soil/water) WATER Lab Sample ID: BEZ34

Sample wt/vol: 1000 (q/mL) ML Lab File ID: F0724029

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. dec. Date Extracted:06/30/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/25/90

GPC Cleanup: (Y/N) N pH: 0.0 Dilution Factor: 1.800

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L Q

! 319-84-6----alpha-BHC 0.05! U 319-85-7-----beta-BHC 0.05! U ! 319-86-8-----delta-BHC 0.05; U : 58-89-9-----gamma-BHC (Lindane) 0.05! U 76-44-8------Heptachlor 0.051 U % 309-00-2-----Aldrin 0.05; U 1024-57-3-----Heptachlor epoxide 0.05! 0 959-98-8-----Endosulfan | 0.05! U 1 60-57-1-----Dieldrin 0.101 8 72-55-9-----4.4'-DDE 0.10: U 72-20-8-----Endrin 0.10! U 33213-65-9----Endosulfan II 0.10! U 72-54-8-----4,4'-DDD 0.10! U 1031-07-8-----Endosulfan sulfate 0.10; U 50-29-3-----4,4'-DDT 0.10! U ! 72-43-5-----Methoxychlor 0.50; U | 53494-70-5----Endrin ketone a.10! u 1 5103-71-9-----alpha-Chlordane 0.50! U 0.50! U : 5103-74-2----gamma-Chlordane 8001-35-2----Toxaphene 1.00! U 42674-11-2----Aroclor-1016-<u>0.50</u>! 11104-28-2----Aroclor-1221 0.50! U 1/1141-16-5----Aroclor-1232 0.50! U 53469-21-9----Aroclor-1242 0.50; U 2672-29-6-----Aroclor-1254 11097-69-1-----Aroclor-1260 0.50! U 1.00! U

FORM | PEST

EPA SAMPLE NO.

BEZ83

Lab Name: S-CUBED Contract: 68-D9-0027

COMPOUND

12672-29-6-----Aroclor-1248

11097-69-1--<u>---Aroclor=1254</u>

4-1096-82-5----Aroclor-1260

CAS NO.

Lab Code: S3 Case No.: 14407 SAS No.: SDG No.: BEZ67

Matrix: (soil/water) WATER Lab Sample 10: BEZ83

Sample wt/vol: 1000 (g/mL) ML Lab File ID: F0724028

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. dec. Date Extracted:06/30/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/25/90

GPC Cleanup: (Y/N) N pH: 0.0 Dilution Factor: 1.000

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

319-84-6-----alpha-BHC 0.051 U\_ 319-85-7-----beta-BHC 0.05! U 0.05; U ! 319-86-8-----delta-BHC ! 58-89-9-----gamma-BHC (Lindane) 0.05! U 76-44-8------Heptachlor 0.05! - 41 309-00-2----Aldrin 0.05!-81 1024-57-3-----Heptachlor epoxide 0.05! U. 959-98-3-----Endosulfan | 0.05! UT 60-57-1------Dieldrin 0.10! 81 72-55-9-----4.4'-DDE 0.101 U ! 72-20-8-----Endrin 0.10! 8 . 33213-65-9----Endosulfan II 0.10! U 72-54-8-----4,4'-DDD 0.10! U 1031-07-8-----Endosulfan sulfate 0.10! U 0.10! Ü 50-29-3-----4,4'-DDT 72-43-5-----Methoxychlor 0.50! U 53494-70-5----Endrin ketone a. 10! u 5103-71-9-----alpha-Chlordane 0.50! U 5103-74-2----gamma-Chlordane 0.50; U 8001-35-2----Toxaphene 1.00! U 12674-11-2--- Aroctor-1016 0<del>-5</del>9==== 11104-28-2----Aroclor-1221 0.50; U 11141-16-5----Aroclor-1232 0.501 U \$3469-21-9----Aroclor-1242 0.50; U

0.50! U

1.00! U

1---0.0-/-

Lab Name: S-CUBED Contract: 68-D9-0027

CAS NO.

Lab Code: S3 Case No.: 14407 SAS No.: SDG No.: BEZ67

Matrix: (soil/water) SOIL Lab Sample ID: BEZ8;

Sample wt/vol: 30.3 (g/mL) G Lab File 10: F0724077

Level: (low/med) LOW Date Received: 06/27/30

% Moisture: not dec. 23 dec. Date Extracted:07/06/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 37/27/90

GPC Cleanup: (Y/N) N pH: 7.5 Dilution Factor: 1.000

COMPOUND

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

11.00!-319-84-6-----alpha-BHC 319-35-7-----beta-BHC 88.001 319-86-8-----delta-BHC 10.00! U [ 58-89-9-----gamma-BHC (Lindane) 10.001 U. 76-44-8-----Heptachlor 10.001 U 309-00-2----Aldrin 10.001 0 1024-57-3-----Heptachlor epoxide 10.00! U 959-98-8-----Endosulfan | 10.00! U 60-57-1-----Dieldrin 21.00¦ U 72-55-9-----4.4'-DDE 21.00! 72-20-8-----Endrin 39.00! 33213-65-9----Endosulfan II 120.00! 72-54-8-----4,4'-DDD 54.00! 50.00! 1031-07-8-----Endosulfan sulfate 50-29-3-----4.4'-DDT 21.00! U 72-43-5-----**Methoxychlor** 100.00; U 53494-70-5----Endrin ketone 21.00; U 100.00! U 5103-71-9-----alpha-Chlordane 100.001 0 5103-74-2----gamma-Chlordane 8001-35-2----Toxaphene 210.00! U 72674=11=2----Aroclor=1016 100.00-!-|1104-28-2----Aroclor-1221 100.001 11141-16-5----Aroclor-1232 100.00! 0 100.00! U 53469-21-9----Aroclor-1242 100.00! U 12672-29-6----Aroclor-1248 1097-69-1----Aroclor-1254 210.001 . . 1-1-0-96-82-5----Aroclor=1260 1-8-00--00-

# 1D PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BEZ80

Lab Name: S-CUBED Contract: 68-D9-0027

Lab Code: S3 Case No.: 14407 SAS No.: SDG No.: BEZ67

Matrix: (soil/water) SOIL Lab Sample ID: BEZ80

Sample wt/vol: 29.8 (g/mL) G Lab File ID: F0724075

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 30 dec. Date Extracted:07/06/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/90

GPC Cleanup: (Y/N) N pH: 8.6 Dilution Factor: 1.000

CAS NO. COMPOUND (ug/L or ug/kg) UG/kG

and the second of the second o	· · · · · · · · · · · · · · · · · ·
210 04 0	42.00
319-84-6alpha-BHC	42.00
319-85-7beta-BHC	330.00
319-86-8delta-BHC	12.00 U.
58-89-9gamma-BHC (Lindane)	12.00  U
76-44-8Heptachlor	12.00   Up
309-00-2Aldrin	12.00   U
1024-57-3Heptachlor epoxide	1 12.00   U
959-98-8Endosulfan I	12.00  U
60-57-1Dieldrin	; 23.00; U ;
72-55-94.4'-DDE	560.00
72-20-8Endrin	23.001 0 1
33213-65-9Endosulfan II	430.00
72-54-84.4'-DDD	150.00
1031-07-8Endosulfan sulfate	23.001 U
50-29-34.4'-DDT	110.00
72-43-5Methoxychlor	120.001 0 - 1
53494-70-5Endrin ketone	23.00 U
5103-71-9alpha-Chlordane	410.00
5103-74-2gamma-Chlordane	300.00!
8001-35-2Toxaphene	230.00! U - !
\$12674-11-2=====Aroc-lor-1016	120.00 00
111104-28-2Aroclor-1221	120.00! U
111141-16-5Aroclor-1232	1 120.00! U
53469-21-9Aroclor-1242	120.00   U
12672-29-6Aroclor-1248	120.00! U
111097-69-1Aroclor-1254	5200.00
C11096-82-5 Aroclor-1260	230-00-0
to the second of	

EPA SAMPLE NO.

BEZ79DL

Lab Name: S-CUBED Contract: 68-D9-0027

Lab Code: S3 Case No.: 14407 SAS No.: SDG No.: BEZ67

Matrix: (soil/water) SOIL Lab Sample ID: DLZ79

Sample wt/vol: 30.1 (g/mL) G Lab File ID: F0724058

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 24 dec. \_\_\_ Date Extracted:07/06/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/26/90

GPC Cleanup: (Y/N) N pH: 8.3 Dilution Factor:10.000

CAS NO.	COMPOUND (ug/	L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	110.00	) ) ) U
319-85-7	beta-BHC	1400.00	)
319-86-8	delta-BHC	110.00	ט וֹ ט
58-89-9	gamma-BHC (Lindane)	! 32.00	ل (د
76-44-8	Heptachlor	120.00	)
309-00-2	Aldrin	{ 110.00	); U
1024-57-3	Heptachlor epoxide	110.00	); U
359-98-8	Endosulfan I	110.00	ט ו
50-57-1	Dieldrin	1 210.00	ט! ט
. 4-22-3	4 4 -005	1 1000.00	) (
72-20-8	Endrin	1 210.00	): U
33213-65-9	Endosulfan II	! 6900.00	) {
72-54-8	Endosulfan sulfate	310.00	) (
1031-07-8	Endosulfan sulfate	210.00	); U
0-29-3	4.4'-DDT	! 2700.00	
'2-43-5	Methoxychlor		); U
3494-70-5	Endrin ketone	210.00	
5103-71-9	alpha-Chlordane	3800.00	
3103-74-2	gamma-Chlordane	3500.00	
3001-35-2	Poxaphene	2100.00	); U
2674-11-2	Aroclor=1016	1:00:.00	
1104-28-2	Aroclor-1221	1100.00	
11141-16-5	Aroclor-1232	1100.00	,
3469-21-9	Aroclor-1242	1100.00	-
2672-29-6	Aroclor-1248	1100.00	•
1097-69-1	Aroclor-1254 Aroclor-1260	2100.00	, -
1096=82=5==	Aroclor-1260	87000-00	)

Lab Name: S-CUBED Contract: 68-D9-0027

Lab Code: S3 Case No.: 14407 SAS No.: SDG No.: BEZ67

Matrix: (soil/water) SOIL Lab Sample ID: BEZ79

Sample wt/vol: 30.1 (g/mL) G Lab File ID: F0727022

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 24 dec. Date Extracted:07/06/30

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/28/90

GPC Cleanup: (Y/N) N pH: 8.3 Dilution Factor: 1.000

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

,		
i	319-84-6alpha-BHC	20 001
,	319-85-7beta-BHC	28.00
;		730.00 =
i	319-86-8delta-BHC	100.00 -
i	58-89-9gamma-BHC (Lindane)	11.00; 0 7;
i	76-44-8Heptachlor	110.00;
	309-00-2Aldrin	11.001 U
;	1024-57-3Heptachlor epoxide	11.00   U   1
1	959-98-8Endosulfan 1	11.00   U !
!	60-57-1Dieldrin	1 21.00   U = 1
ı	72-55-94.4'-DDE	1800.00;
ĭ	72-20-8Endrin	1 21.001 UF 1
ì	33213-65-9Endosulfan II	1 2900.001 : :
ŧ,	72-54-84,4'-DDD	330.00;
!	1031-07-8Endosulfan sulfate	; 21.00; U ;
!	50-29-34,4'-DDT	1 21.00 U
!	72-43-5Methoxychlor	110.001 U
1	53494-70-5Endrin ketone	1 21.00! U!!
1	5103-71-9alpha-Chlordane	; 110.00; U ;
1	5103-74-2gamma-Chlordane	! 110.00! U !
)	8001-35-2Toxaphene	1 210.001 U
· 4	1-2-6-7-4-11-2Aroclor-10-16	1-0001
-; }	111104-28-2Aroclor-1221	110.00:0
- ;	11141-16-5Aroclor-1232	; 110.00; U \$
!	53469-21-9Aroclor-1242	t 110.00; U :
!	12672-29-6Aroclor-1248	! 110.00¦ U. ∰
!	₩ 1097-69-1Aroclor-1254	! 210.00! ∪ - ∜
4	1096=82=5Aroclor=1260	37000.00

Lab Name: S-CUBED Contract: 68-D9-0027

Lab Code: S3 Case No.: 14407 SAS No.: SDG No.: BEZ67

Matrix: (soil/water) SOIL Lab Sample ID: BEZ78

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F0724073

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 13 dec. Date Extracted:07/06/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/30

GPC Cleanup: (Y/N) N pH: 8.1 Dilution Factor: 1.000

	CAS NO.	COMPOUND	(ug/L or	ug/Kg)	UG/KG	Q
1		· · · -				
1	319-84-6	-1-h- BUG		i	0 001	· ;
1	319-85-7			i	9.30	
i				į	66.00	
i	319-86-8				9.30	•
i	58-89-9	-gamma-BHC (Lindan	<b>e</b> )	į	9.30	
i	76-44-8			:	9.30	
	309-00-2				9.30	
i		-Heptachlor epoxid	е		9.30	
1	959-98-8			}	9.30	-
1	60-57-1				18.00¦	
-	72-55-9			}	60.00!	
	72-20-8	= :		;	24.001	
;	33213-65-9			;	18.00¦	U :
;	72-54-8			!	67.001	3
1		-Endosulfan sulfat	e	1	18.00;	
1	50-29-3			!	26.00	
1	72-43-5			1	92.001	
;	53494-70-5			1	18.00¦	- ,
;		-alpha-Chlordane		1 .	92.00!	
1		-gamma-Chlordane		!	92.00	•
!_	8001-35-2			<u> </u>	180.00;	
-:	12674-11-2				92-00-	
-	11104-28-2			1	92.00	- PP 4
- 1	1:141-16-5			!	92.00;	171
¥.	53469-21-9			t i	92.00	1 19
{·	12672-29-6		•		92.00	U i lill
1	11097-69-1			_ !	, , , , , , , , , , , , , , , , , , , ,	υ ; ; [[]
!F	1-1-0-96-82-5	-Aroclor-1260			1:8:0-:-0:0: 3	
1				1		1

## PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: S-CUBED

Contract: 68-D9-0027

Lab Code: S3 Case No.: 14407 SAS No.: SDG No.: BEZ67

Matrix: (soil/water) SOIL

Lab Sample ID: BEZ77

Sample wt/vol: 29.8 (g/mL) G

Lab File ID: F0724072

Level: (low/med) LOW

Date Received: 06/27/90

% Moisture: not dec. 13 dec.\_\_\_\_

Date Extracted:07/06/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/90

GPC Cleanup: (Y/N) N pH: 8.1 Dilution Factor: 1.000

CÁS NO.	COMPOUND (ug/	L or ug/Kg) t	JG/KG	Q
319-84-6	alpha-BHC		9.30	UJ
319-85-7	beta-BHC		51.00	于
319-86-8	delta-BHC		9.30	ů.
58-89-9	gamma-BHC (Lindane)	!	9.30	
76-44-8	Heptachlor	:	9.30	U,
309-00-2	Aldrin	<b>!</b>	9.30	l U .
1024-57-3	Heptachlor epoxide		9.30	וטן
959-98-8	Endosulfan 1	}	9.30	ني ا
60-57-1	Dieldrin	<b>!</b>	19.00	U ~
72-55-9	4.4'-DDE		45.00	7
72-20-8	Endrin	1	16.00	Ú
33213-65-9	Endosultan II	;	19.00	
72-54-8	4,4'-DDD	1	35.00	•
1031-07-8	Endosulfan sulfate		19.00	U'
50-29-3	4,4'-DDT		19.00	
72-43-5	Methoxychlor	!	93.00	
53494-70-5	Endrin ketone		19.00	ן ע ט
5103-71-9	alpha-Chlordane	<u> </u>	93.00	
5103-74-2	gamma-Chlordane		2.10	J
8001-35-2	Toxaphene		190.00	
12674-11-2	Aroclor-1016		9.3 = 0.0	
11104-28-2	Aroclor-1221		93.00	U .
11141-16-5	Aroclor-1232		93.00	
53469-21-9	Aroclor-1242	!	93.00	
	Aroclor-1248	<u></u> !	93.00	
1097-69-1	Aroclor-1254		190.00	_
1.1096-82-5-	Aroclor=1260	COLUMN TRAFFIC COLUMN TO SERVICE COLUMN TO SERVICE COLUMN TRAFFIC	1,90,00,	U
	· · · · · · · · · · · · · · · · · · ·			

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: S-CUBED Contract: 68-D9-0027

Lab Code: S3 Case No.: 14407 SAS No.: SDG No.: BEZ67

Matrix: (soil/water) SOIL

Lab Sample ID: BEZ76

Sample wt/vol: 30.1 (g/mL) G

Lab File ID: F0724071

Level: (low/med) LOW

Date Received: 06/27/90

% Moisture: not dec. 20 dec.\_\_\_\_

Date Extracted:07/06/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/27/90

GPC Cleanup: (Y/N) N pH: 8.2 Dilution Factor: 1.000

CAS NO.	COMPOUND (ug/L or	ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	10.00	U <del>;</del>
319-85-7	beta-BHC	10.00!	υ
319-86-8	dalta-BHC	! 10.00!	U !
58-89-9	gamma-BHC (Lindane)	10.00!	U
76-44-8	Heptachlor	! 10.00!	U
309-00-2	Aldrin	10.00	U .
1024-57-3	Aldrin	10.00	υ
959-98-8	Endosulfan I	10.00;	
60-57-1	Dieldrin	20.00!	U- '-
72-55-9	4,4'-DDE	190.00;	
72-20-8	Endrin	20.00	U
33213-65-9	Endosulfan II	20.00!	U
72-54-8	4,4'-DDD	52.001	•
1031-07-8	4,4'-DDD	20.00	U .
50-29-3	4.4'-DDT	39.00;	
72-43-5	Methoxychlor	\ 100.00 \	U
53494-70-5	Endrin ketone	{ 20.00!	U
5103-71-9	alpha-Chlordane	; 360.00;	
5103-74-2	gamma-Chlordane	350.00!	
8001-35-2	Toxaphene	200.00	U
111104-28-2	Aroclor-1221	{ 100.00 }	U
11141-16-5	Aroclor-1232	; 100.00;	υį
53469-21-9	Aroclor-1242	100.00	u!
12672-29-6	Aroclor-1248	100.00	U ·
11097-69-1	Aroclor-1254	; 200.00;	U
	Anoclor-1260	200.00	<u> </u>

## PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BEZ74

Lab Name: S-CUBED Contract: 68-D9-0027

Lab Code: S3 Case No.: 14407 SAS No.: SDG No.: BEZ67

Matrix: (soil/water) SOIL Lab Sample ID: BEZ74

Sample wt/vol: 30.4 (g/mL) G Lab File ID: F0727021

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 13 dec. \_\_\_\_ Date Extracted:07/06/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/28/90

GPC Cleanup: (Y/N) N pH: 8.1 Dilution Factor: 1.000

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG 319-84-6-----alpha-BHC 330.00! 319-85-7-----beta-BHC\_ 2300.00; 319-86-8-----delta-BHC\_ 99.00 58-89-9----gamma-BHC (Lindane)\_\_\_\_\_\_ : 1<del>6.0</del>0; 2. 76-44-8-----Heptachlor\_\_\_\_ 9.10; U 309-00-2-----Aldrin \_\_\_ 9.10; U 1024-57-3-----Heptachlor epoxide\_\_\_\_\_ 9.10; U 959-98-8-----Endosulfan I\_\_\_\_\_ 9.10; U 60-57-1----Dieldrin\_\_\_\_\_ 39.00 72-55-9-----4,4'-DDE\_\_\_\_\_ 180.00 72-20-8-----Endrin\_\_\_ 18.00; U 33213-65-9----Endosulfan II\_\_\_\_ 18.00; U 72-54-8-----4,4'-DDD\_\_\_\_\_ 1700:001 C 1031-07-8----Endosulfan sulfate\_\_\_\_ 18.00; U 50-29-3-----4,4'-DDT\_\_\_ 420.00 72-43-5-----Methoxychlor\_\_ 91.00; U 53494-70-5----Endrin ketone\_\_\_ 18.00! U 60.00; J 5103-71-9----alpha-Chlordane\_\_\_\_ 5103-74-2----gamma-Chlordane\_\_\_\_ 21.00; J 8001-35-2----Toxaphene\_\_\_\_ 180.00; U 12674-11-2---Aroclor-1016 ---9-1--00-I---U 11104-28-2----Aroclor-1221 91.00; U 11141-16-5----Aroclor-1232\_\_\_\_\_ 91.00! U |53469-21-9----Aroclor-1242 91.00; U 12672-29-6----Aroclor-1248 91.00; U 11097-69-1----Aroclor-1254\_ 180.00! U~ 1096-82-5----Aroclor-1260

STEEN D & J TRUCKING

TDD1: 02-9005-05 SAMPLING DATE: 6/26/90

EPA CASE NO : 14407 LAB: S CUBED

PESTICIDES Sample ID Mo. Traffic Report Mo. Matrix Units Dilution Factor/GPC Cleanup (Y) Percent Moisture	MJGG-S8 Bf179 SDIL ug/kg l	10 81/80 5011 ug/kg 1 1	NJGG-S10 81/81 SDIL ug/kg 1 23	MJGG-RIM1 BE283 WAIER Ug/L 1	MJGG-RIM2 BE/84 MATER UG/L 1	MJGG-RIM3 BE185 MATER Ug/L 1	MJGG-RIM4 BE286 WATER Ug/L 1	MJGG-TBLK BE187 WATER Ug/L M/A
alpha-BHC	28 E	42 [	11		• • • • • • • • • • •			KR
beta-BHC	130 E	330 8	88	[				MR
delta-BHC	; 100 E							MR
gamma-BHC (Lindane)								MR
Heptachlor	; 110 [			R	R	R	R	MR
Aldrin	:			R	R	R	R	HR
Heptachlor epoxide	i 1							MR
Endosulfan I	:							WR
Dieldrin	:			R	R	R	R	MR
4,4'-DDE	1800 E	560 E						MR
Endrin	1		39 1	E R	R	R	R	MR
Endosulfan II	; 2900 E	430 E	120 1	[				MR
4,4'-DDD	; 330 E	150 E	54 (	E				NR
Endosulfan sulfate	-		50	[				NR
4,4'-DDT		110 E						MR
Methoxychlor	:							MR
Endrin ketone	i							MR
alpha-Chlordane	į	410 E						MR
gamma-Chlordane		300 €						MR
Toxaphene	* :							MR
Aroclor-1016	i							MR
Aroclor-1221	1	,						NR
Aroclor-1232	!							NR
Aroclor-1242	:							HR
Aroclor-1248			en.					NR
Aroclor=1254		5200-{-	5 1800 €					HR

#### MOTES:

Blank space - compound analyzed for but not detected

- B compound found in lab blank as well as sample, indicates possible/probable blank contamination
- E estimated value
- . J estimated value, compound present below CRQL but above IDL
- R analysis did not pass EPA QA/QC
- N Presumptive evidence of the presence

932500104

found in several samples. The major QC problem was a soil lab blank on July 17 which contained carbon disulfide at a level of 7 ppb. Also the matrix analysis of BEZ72 yielded inconsistent results for toluene, due to the varying amount of this compound native to the sample.

BNA analyses were carried out by medium level techniques for samples BEZ78,BEZ79,BEZ80 and BEZ81. Samples were characterized by high levels of substituted benzenes, hydrocarbons and polynuclear aromatic hydrocarbons. Reextractions (outside of holding times) were necessary for BEZ69,BEZ76,and BEZ78 due to low surrogate recoveries in the original analyses.

Pesticide analyses were also complicated by the highly organic nature of the soil samples. Dilutions (1:10) were necessary for BEZ67,BEZ71 and BEZ79. Numerous single component pesticides were detected in most sample. Most could not be confirmed by GC-MS, probably due to interferences. Samples-BEZ79, BEZ80, and -BEZ81-contained Aroclors. Other-samples-seemed to-contain-degraded Aroclor epatterns: The matrix compounds in the spiked water samples were outside of the windows due to the sample matrix, thus no data are reported for most of these compounds. The soil matrix results were more normal. These complex samples precluded successful analyses of the close out EVAL and IND standards in the first 72 hour sequence. Please note that Forms IX could not be numbered correctly because there were more than nine forms.

Please note that S-CUBED uses megabore capillary for pesticide analysis, thus the action limit for DBC percent difference is 1.5 % rather than 0.3 %. S-CUBED also experiences interferences with the benzoic acid quantitation mass of 122 from 2,4 dimethyl phenol. Although the top of the chromatographic peak of these compounds are separated by about a minute, benzoic acid exhibits a high level of "fronting" which causes coelution of these two compounds. Consequently it is considerably more accurate to use the base peak of 105 for the quantitation of benzoic acid. Also note that S-CUBED uses a "X" flag to indicate the matrix spiked compounds.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer readable data submitted on floppy diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

füülkensen

Date: 7/=1/10

JoAnn Wilkinson, Project Manager

Lab Name: S-CUBED Contract: 68-D9-0027

Lab Code: S3 Case No.: 14407 SAS No.: SDG No.: BEZ67

Matrix: (soil/water) SOIL Lab Sample ID: BEZ73

Sample wt/vol: 30.0 (g/mL) G Lab File ID: F0724067

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 11 dec. Date Extracted:07/06/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/26/90

GPC Cleanup: (Y/N) N pH: 8.2 Dilution Factor: 1.000

	CAS NO.	COMPOUND	(ug/L o	r ug/Kg)	UG/KG	Q
;				;	i •	f 1
;		alpha-BHC		:	9.00{	UŢ!
!		beta-BHC		l I	17.00;	7
1		delta-BHC		<b>;</b>	9.00¦	
ŗ	58-89-9	gamma-BHC (Lin	dane)	*	9.00;	U 1 1
ŀ		Heptachlor		. !	9.00!	: ا ک
t t	309-00-2		•	;	9.00;	U !
1	1024-57-3	Heptachlor epo	xide	;	9.00!	U !
1		Endosulfan I	****	:	9.00;	5. :
į		Dieldrin		1	100.00;	-
ì		4,4'-DDE		1	21.00	. !
!	72-20-8		_	;	18.00;	U :
ŀ		Endosulfan H		<b>†</b>	18.00¦	U !
ļ		4,4'-DDD		}	18.00	U = 1
,		Endosulfan sul	fate_	;	18.00;	U !
1		4,4'-DDT		:	75.00	= 1
1		Methoxychlor			90.00	
i E		Endrin ketone			18.00	-
ì		alpha-Chlordan			90.001	:
;		gamma-Chlordan	e .	!	90.00!	U !
1		Toxaphene	3 7 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		180.00	U
1	H	====Arocler=1016		1	90700	- A
1		Aroclor-1221		į.	90.00}	. 13
!		Aroclor-1232	-			U
1	1.4	Aroclor-1242		-		U
1		Aroclor-1248			90.00!	U
1		Aroclor-1254		,	180.00	U
1	11096-82-5-	Arocler-1260	1, 2, 2, 3, 6	7	18000	
1	-			;		; <b>(8)</b>

Lab Name: S-CUBED Contract: 68-D9-0027

Lab Code: S3 Case No.: 14407 SAS No.: SDG No.: BEZ67

Matrix: (soil/water) SOIL Lab Sample ID: BEZ72

Sample wt/vol: 30.1 (g/mL) G Lab File ID: F0724064

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 21 dec. Date Extracted:07/06/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/26/90

GPC Cleanup: (Y/N) N pH: 8.1 Dilution Factor: 1.000

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

	to a control of policy of the control of the contro			
ì		•		i
i	319-84-6alpha-BHC	10.00	UT	1
ļ	319-85-7beta-BHC	10.00	U	!
i	319-86-8delta-BHC	10.00	U	1
;	58-89-9gamma-BHC (Lindane)	10.00	U	1
ì	76-44-8Heptachlor	10.00	U	1
1	309-00-2Aldrin	10.00;	υ	1
;	1024-57-3Heptachlor epoxide	10.00	U	1
1	959-98-8Endosulfan	10.00	υ	· •
ţ	60-57-1Dieldrin	20.00	Ü	1
•	72-55-94.4'-DDE	20.00	Ü	1
ì	72-20-8Endrin	20.00	U	1
1	33213-65-9Endosulfan II	20.00	υ	,
1	72-54-84,4'-DDD	20.00;	U	t
;	1031-07-8Endosulfan sulfate	20.00!	U	1
1	50-29-34,4'-DDT	20.00;	U	1
!	72-43-5Methoxychlor	100.00	U	ł
!	53494-70-5Endrin ketone	20.00!	U	ľ
İ	5103-71-9alpha-Chlordane	100.00	U	1
!	5103-74-2gamma-Chlordane	100.00	U	ì
!	8001-35-2Toxaphene	200.00	U	;
)	2674-1-1-2Aroc-lon-10-16	1.00.00:1	<u> </u>	i Di
:[	11104-28-2Aroclor-1221	100.00	U	Ŋ
:]	11141~16-5Aroclor-1232	100.001	U	Ţ
1	53469-21-9Aroclor-1242	100.00!	U	į
:	12672-29-6Aroclor-1248	100.00	U b	į
:	11097-69-1Aroclor-1254	200.001	U	ì
;	111096-82-5Aroctor=1260	200-00-	_U	is Li
; '			The state of the s	1

FORM | PEST

## PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BEZ71

Lab Name: S-CUBED Contract: 68-D9-0027

Lab Code: S3 Case No.: 14407 SAS No.: SDG No.: BEZ67

Matrix: (soil/water) SOIL Lab Sample ID: BEZ71

Sample wt/vol: 30.3 (g/mL) G Lab File ID: F0724063

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec. 72 dec. \_\_\_\_ Date Extracted:07/06/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 07/26/90

GPC Cleanup: (Y/N) N pH: 7.6 Dilution Factor: 1.000

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/kg) UG/kG Q

319-84-6alpha-BHC	28.00
319-85-7beta-BHC	28.00¦ U. ¦
319-86-8delta-BHC	28.00¦ U-
58-89-9gamma-BHC (Lindane)	28.00¦ U. ;
76-44-8Heptachlor	28.00¦ U ¦
309-00-2Aldrin	28.00¦ U ¦
1024-57-3Heptachion epoxide	28.00¦ U
959-98-8Endosulfan	28.00; U ;
60-57-1Dieldrin	56.00¦ U ¦
72-55-94,4'-DDE	56.00¦ U ¦
72-20-8Endrin	56.00¦ U
! 33213-65-9Endosulfan	56.00¦ U
72-54-84,4'-DDD	1600.00! - :
1031-07-8Endosulfan sulfate	56.00¦ U ¦
1 50-29-34.4'-DDT	56.00! U - !
72-43-5Methoxychlor	280.00¦ U ;
53494-70-5Endrin ketone	56.00! U
1 5103-71-9alpha-Chlordane	280.00 0
5103-74-2gamma-Chlordane	440.00
8001-35-2Toxaphene	560.00; U ;
12674-11-2Aroclor-1016	280.00
111104-28-2Aroclor-1221	280.00; 0
11141-16-5Aroclor-1232	280.00; U
3 53469-21-9Aroclor-1242	280.00¦ U 🖟
1 12672-29-6Aroclor-1248	280.00; U
111097-69-1Aroclor-1254	560.00¦ ບ 📳
11097-69-1Aroclor-1254 11096-82-5Aroclor-1260	560.00

10 PESTICIDE ORGANICS ANALYSIS DATA SHEET EPA SAMPLE NO.

Lab Name: S-CUBED

Contract: 68-D9-0027

Lab Code: S3 Case No.: 14407 SAS No.:

SDG No.: BEZ67

Matrix: (soil/water) SOIL

Lab Sample ID: BEZ70

Sample wt/vol: 29.9 (g/mL) G

Lab File ID: F0727020

Level: (low/med) LOW

Date Received: 06/27/90

\* Moisture: not dec. 46 dec.

Date Extracted: 07/06/90

Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed: 07/28/90

3PC Cleanup: (Y/N) N pH: 8.6 Dilution Factor: 1.000

CAS NO.

COMPOUND

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q

1		
;	319-84-6alpha-BHC	15.00 1
1	319-85-7beta-BHC	! 42.001 <b>∄</b> }
!	319-86-8delta-BHC	15.00; UT ;
!	58-89-9gamma-BHC (Lindane)	; 15.00; U !
:	76-44-8Heptachlor	15.00 U
!	309-00-2Aldrin	15.00  U
!	1024-57-3Heptachlor epoxide	15.00  U
!	959-98-8Endosulfan	15.00 U
t	60-57-1Dieldrin	30.00 U
	72-55-94,4'-DDE	67.00
į.	72-20-8Endrin	30.00! U
!	33213-65-9Endosulfan II	58.00
1	72-54-84,4'-DDD	36.00!
1	1031-07-8Endosulfan sulfate	30.00; U
1	50-29-34,4'-DDT	; 30.00; U ;
;	72-43-5Methoxychlor	! 150.00! U ;
!	53494-70-5Endrin ketone	; 30.00; U ;
;	5103-71-9alpha-Chlordane	; 150.00¦ U ;
1	5103-74-2gamma-Chlordane	; 150.00; U ;
1	8001-35-2	300.00 U
† 1	2674-11-2Arector-1016	150.00
l I	11104-28-2Aroclor-1221	150.00
1	11141-16-5Aroclor-1232	¦ 150.00¦ប 👹
t 1	53469-21-9Aroclor-1242	) 150.00¦ ប 🛴
ł	12672-29-5Aroclor-1248	¦ 150.00¦ບ 📓
ŀ	11097-69-1Aroclor-1254	; 300.00; ບ 🥞
;	1-1096-82-5Aroclor-1260	300.00 \
1		

### 1D PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BEZ69

Contract: 68-D9-0027 Lab Name: S-CUBED

Lab Code: S3 Case No.: 14407 SAS No.: SDG No.: BEZ67

Matrix: (soil/water) WATER Lab Sample ID: BEZ69

Sample wt/vol: 1000 (g/mL) ML Lab File ID: F0724079

Level: (low/med) LOW Date Received: 06/27/90

% Mo:sture: not dec.\_\_ \_ dec.\_\_. Date Extracted: 06/30/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/27/90

GPC Cleanup: (Y/N) N pH: 0.0 Dilution Factor: 1.000

CONCENTRATION UNITS: CAS NO. COMPOUND (ug/L or ug/Kg) UG/L 319-84-6----alpha-BHC\_\_\_\_\_ 0.05! U 0.46 0.05! U 58-89-9-----gamma-BHC (Lindane) 76-44-8-----Heptachlor 0.05; U 0.05! U 309-00-2-----Aldrin\_\_\_\_\_ 0.05! U 1024-57-3-----Heptachlor epoxide 0.05! U 959-98-8-----Endosulfan | 0.05; U 60-57-1----Dieldrin\_\_\_\_\_ 0.101 0 72-55-9-----4,4'-DDE 72-20-8-----Endrin\_\_\_\_\_ 0.18; 0.10; U 33213-65-9----Endosulfan II 0.10! U 72-54-8-----4,4'-DDD\_\_\_\_\_\_ 0.13 1031-07-8-----Endosulfan sulfate\_\_\_\_ 0.10; U 50-29-3-----4,4'-DDT\_\_\_\_\_ 0.10! U 72-43-5-----Methoxychlor\_\_\_\_\_ 0.50; U 53494-70-5----Endrin ketone\_\_\_\_\_\_ 0.10; U 5103-71-9-----alpha-Chlordane \_\_\_\_\_ : 0.50; U 5103-74-2----gamma-Chlordane\_\_\_\_\_ 0.501 U 8001-35-2----Toxaphene \_\_\_\_\_ 1.00; U 12674-11-2----Aroclon-1016 ~0~50-l~d-11104-28-2----Aroclor-1221 \_\_\_\_\_ 0.50 U 11141-16-5----Aroclor-1232\_\_\_\_\_\_ 0.50; U 53469-21-9----Aroclor-1242 0.50; U 12672-29-6----Aroclor-1248 0.50; U 1.00¦ U 11097-69-1----Aroclor-1254 1-1096-82-5----Aroclor=1260 1,..0.0.!

### 10 PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: S-CUBED

Contract: 68-D9-0027

Lab Code: S3 Case No.: 14407 SAS No.:

SDG No.: BEZ67

Matrix: (soil/water) WATER

1000 (g/mL) ML

Lab Sample ID: DLZ68

Sample wt/vol:

Lab File ID: F0724032

Level: (low/med) LOW

Date Received: 06/27/90

% Mo'sture: not dec. \_\_\_\_ dec. \_\_\_

Extraction: (SepF/Cont/Sonc) SEPF

Date Extracted:06/30/90 Date Analyzed: 07/25/90

GPC Cleanup: (Y/N) N

pH: 0.0

Dilution Factor: 10.000

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND (ug/L or ug/K	.9/7 OG/C	. 4
319-84-6	alpha-BHC	0.50	
319-85-7	beta-BHC	0.50;	
319-86-8	delta-BHC	0.50;	
58-89	delta-BHC	0.50	-
76-44-8	Heptachlor	0.50	
309-00-2	Aldrin	0.50;	
1024-57-3	Aldrin	0.50	
959-98-8	Endosulfan 1	0.50;	
60-57-1	Dieldrin	1.00	
72-55-9	4,4'-DDE	1.00	
72-20-9	Endnin	1.00;	
22212-65-0	Endrin	1.00	
33213-65-9	Endosultan II	1.00	
1031 07 0	4.4'-DDD_	1.00	
1031-01-8	Endosulfan sulfate	1.00	
50-29-3	4,4'-DDT	1.00	
12-43-5	methoxychior	5.00	
53494-10-5	Endrin ketone	1.00	
2102-11-3	arpha-chiordane	3.00,	
5103-74-2	gamma-Chlordane	5.00	-
8001-35-2	Toxaphene Anoclor-1016	10.00;	U
12674-11-2-	Aroclor-1016	5.00	ט'י
11104-28-2	Aroclor-1221	5.00!	
11141-16-5	Aroclor-1232	5.00!	U
53469-21-9	Aroclor-1242	5.00!	
12672-29-6	Aroclor-1248	5.00	U
11097-69-1	Aroclor-1254	10.00;	
11096-82-5	Aroclor-1260	10.00	U

### 10 PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: S-CUBED

Contract: 68-09-0027

Lab Code: S3 Case No.: 14407 SAS No.: SDG No.: BEZ67

Matrix: (soil/water) WATER

Lab Sample ID: BEZ68

Sample wt/vol: 1000 (g/mL) ML

Lab Fila ID: F0724078

Level: (low/med) LOW

Date Received: 06/27/90

% Moisture: not dec. \_\_\_\_ dec. \_\_\_ Date Extracted:06/30/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/27/90

GPC Cleanup: (Y/N) N pH: 0.0 Dilution Factor: 1.000

CO	NCENTR	ATION	U	VITS:
,				

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	0.0	8 .
319-85-7	beta-BHC	! 1.2	0 {
319-86-8	delta-BHC gamma-BHC (Lin	0.0	5¦ U
58-89-9	gamma-BHC (Lir	ndane)	5; U
76-44-8	Hentachlor	! 0.0:	5 ¦ U
309-00-2	Aldrin		5¦ U
1024-57-3	Heptachlor epo	oxide : 0.0	5¦ U
959-98-8	Endosulfan l	0.0	
60-57-1	Dieldrin	. 0.1	o ( U
72-55-9	4.4'-DDE	! 0.4	8
72-20-8	Endrin	0.1	o
33213-65-9	Endosulfan II	! 0.2	6 }
72-54-8	4,4'-DDD Endosulfan su	0.7	2 :
1031-07-8	Endosulfan su	lfate 0.10	); U
50-29-3	4,4'-DDT	0.10	ט יָכ
72-43-5	Methoxychlor	. 0.5	ט ; כ
53494-70-5-	Endrin ketone	0.1	o; u
5103-71-9	alpha-Chlordar	ne	B¦ J
5103-74-2	gamma-Chlordar	0.2	4¦ J
8001-35-2	Toxaphene	1.0	ט וכ
12674=11-2-	Aroclor-1016	0.35	
11104-28-2	Aroclor-1221	0.5	); U
11141-16-5-	Aroclor-1232_		ט יכ
53469-21-9-	Aroclor-1242_	0.5	) U
12672-29-6-	Aroclor-1248 _		ט וכ
11097-69-1-	Aroclor-1254 [	1.00	ט ; ט
11096-82-5-	Aroclor-1260	! · 1.00	ט וָכ

# 1D PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BEZ67

Lab Name: S-CUBED Contract: 68-D9-0027

Lab Code: S3 Case No.: 14407 SAS No.: SDG No.: BEZ67

Matrix: (soil/water) WATER Lab Sample ID: BEZ67

Sample wt/vol: 1000 (g/mL) ML Lab File ID: F0724021

Level: (low/med) LOW Date Received: 06/27/90

% Moisture: not dec.\_\_\_\_\_ dec.\_\_\_\_ Date Extracted:06/30/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/24/90

GPC Cleanup: (Y/N) N pH: 0.0 Dilution Factor: 1.000

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

(=3, = =	2
	! !
319-84-6alpha-BHC	0.05
319-85-7beta-BHC	0.05; U
319-86-8delta-BHC	0.05¦ U ;
58-89-9gamma-BHC (Lindane)	! 0.05! ປີ :
; 76-44-8Heptachlor	0.05  8
: 309-00-2Aldrin	0.05  U -
1024-57-3Heptachlor epoxide	0.05  U
959-98-8Endosulfan	; 0.05; U ;
1 60-57-1Dieldrin	0.10
72-55-94,4'-DDE	0.10¦U ;
72-20-8Endrin	( 0.10 ( บ - )
: 33213-65-9Endosulfan II	( 0.10 U )
1 72-54-84.4'-DDD	1 0.10! U !
1031-07-8Endosulfan sulfate	; 0.10; U ;
1 50-29-34,4'-DDT	0.10  0
72-43-5Methoxychlor	0.50! U !
53494-70-5Endrin ketone	0.10 U
5103-71-9alpha-Chlordane	0.50 U
5103-74-2gamma-Chlordane	0.50; U
8001-35-2Toxaphene	1.00! U
12674-11-2Aroclor-1016	
11104-28-2Aroclor-1221	
11141-16-5Aroclor-1232	0.50! U
53469-21-9Aroclor-1242	0.50 U
12672-29-6Aroclor-1248	
11097-69-1Aroclor-1254	
11096-82-5Aroclor=1260	1.00  U

BEZ85

Lab Name: S-CUBED Contract: 68-D9-0027

CAS NO.

tab Code: S3 Case No.: 14407 SAS No.: SDG No.: BEZ67

Matrix: (so:!/water) WATER Lab Sample ID: BEZ85

Sample wt/vol: 1000 (g/mL) ML Lab File ID: F0724030

Level: (low/med) LOW Date Received: 06/27/30

% Moisture: not dec. dec. Date Extracted:06/30/90

Extraction: (SepF/Cont/Sonc) SEPF Date Analyzed: 07/25/33

GFC Cleanup: (Y/N) N pH: 0.0 Dilution Factor: 1.000

COMPOUND

CONCENTRATION UNLTS:

(ug/L or ug/Kg) UG/L

319-84-6-----alpha-BHC 0.05! U 319-85-7-----beta-BHC 0.05! U 319-86-8-----delta-BHC 0.05; U 58-89-9-----gamma-BHC (Lindane) 0.05! U 76-44-8-----Heptachlor 0.05 | 70 : 309-00-2----Aldrin 0.05! # 1024-57-3-----Heptachlor epoxide 0.05! 0 \_ 959-98-8-----Endosulfan | 0.05! U 60-57-1-----Dieldrin 0.10: 변수 72-55-9-----4.4'-DDE 0.101 Ü 72-20-8-----Endrin 0.10: 33213-65-9-----Endosulfan | | 0.10! Ü 72-54-8-----4,4'-000 0.10: 1031-07-8-----Endosulfan sulfate 0.10! U 50-29-3-----4,4'-DDT 0.101 U 72-43-5-----Methoxychlor 0.50! U 53494-70-5-----Endrin ketone 0.10! U 5103-71-9----alpha-Chlordane 0.50! U 5103-74-2----gamma-Chlordane 0.50! U 8001-35-2----Toxaphene 1.00! U 12674-11-2----Arecier-1016\_ 0.50; 11104-28-2----Aroclor-1221 1:141-16-5----Araclar-1232 0.501 U 53469-21-9----Aroclor-1242 0.50! U 12672-29-6----Aroclor-1248 0.50! U 11097-69-1----Aroclor-1254 1.00; U ...O.G.. 

Newark Police Shooting Range

State of Rew Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF HAZARDOUS SITE MITIGATION S

401 E. State St., CN 413, Trenton, NJ. 08625-0413/

(609) 984-2902

Fax # (609) 633-2360

2 1989

MAY 3 1 1989

Claude H. Coleman, Director 4 Newark Police Department 31 Green Street Newark, NJ 07101

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Total .

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1820

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🕈 Anthony J. Farro 🕏 🖓

Director

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Dear Director Coleman,

This letter is in response to an inquiry from Lieutenant Andrew Turner of your Department. On Wednesday, 10 May 1989, I was contacted by Lt. Turner regarding the recently discovered dioxin soil contamination at the Ave Priring Range (site of proposed police academy).

Specifically, in light of the dioxin contamination, Lt. Turner requested guidance on handling and removal of the police department trailers on site which are used for offices, classrooms and storage. Lt. Turner asked that I send recommendations directly to you.

I recently reviewed the Environmental Site Evaluation Report, dated February 1989, prepared by Dresdner, Robin and Associates (DRA) for the City of Newark Department of Engineering. The report presented chemical analysis results of soil samples collected in November 1988 from 7 test pits and 5 surface soil locations across the site. The results indicated that the subject site is contaminated with significant concentrations of total petroleum hydrocarbons and semi-volatile organic compounds. In addition, two areas on site revealed elevated concentrations of PCB compounds? less extent, heavy metal and dioxin/furan contamination was discovered.

### Discussion of Dioxin/Furan Results

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During the November 1988 sampling, soil from 6 sampling locations on site was composited into one sample and analyzed for total dioxin/furan compounds. The composite sample revealed the presence of 3.0 parts per billion (ppb) of total hepta and octa chlorinated dibenzo furan compounds and 14.2 ppb of total hepta and octa chlorinated dibenzo dioxin compounds. The most toxic form of dioxin, 2,3,7,8-tetrachloro dibenzo-p-dioxin (2,3,7,8-TCDD) was not found in this sample. The hepta and octa forms of dioxins/furans found on site are considered approximately 1000 times less toxic than the "tetra" version.

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The NJDEP soil action level for 2,3,7,8-TCDD is 1 ppb. Specific soil action levels do not currently exist for the hepta and octa forms of dioxin and furan. These compounds are considered much less toxic than 2,3,7,8-TCDD, therefore concentrations of up to 1000 ppb (total hepta and octa dioxin/furan) are not considered a significant health threat. The dioxin/furan results reported by DRA cannot be directly compared to these action levels because the collected sample is comprised of soil from several locations on site. Action levels are used for comparison to actual surface soil concentrations, such as those obtained from single-location samples. The composite sample provides general information on site contamination, however, the chemical concentrations reported are considered lower than the actual soil concentrations at one or several of the locations sampled.

To obtain a more accurate assessment of the dioxin/furan contamination on site, DRA is planning to collect additional single-location samples across the site. The results from these samples will be compared to the action levels discussed above.

### Recommendation on Trailer Removal

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I was informed by Lt. Turner that because of the additional sampling required, the Newark Police Department would like to move the trailers to another location to resume training classes without additional interruptions. If the trailers are removed, the following cleaning procedures are recommended prior to removal:

- Wash out the inside of trailers (mop floors, wash down table/counter tops, etc.)
- Wash the outside of trailers by either steam cleaning or cleaning with non-phosphate detergent, scrubbing under carriage and tires with long-handled brushes. Wash waters from both inside and outside of the trailers may be discharged on site, away from the trailers and transportation routes, in a manner which prevents surface runoff.
- Personnel conducting the trailer cleaning must wear appropriate protective clothing such as coveralls, water proof gloves, over boots, etc., and should make an effort to reduce contact with the wash water.

If you have further questions I can be reached at (609) 984-3068.

Yours truly,

Anne G. Hayton

Bureau of Environmental Evaluation and Risk Assessment

HS69/pw

cc: Alvin Zach, Director

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Newark Department of Engineering

Anthony Cavalier, Bureau Chief, Metro Office, NJDEP

Kenneth Kloo, Bureau of Site Assesment, NJDEP

DuPont - Pitt Consol - Conoco - Reilly

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NEWARK, NJ 07114
Penalty ($): 25,000 Superfund Cost Awarded ($):
Judicial District: DNJ Docket Number: 90-2287(HLS)
Result: Consent instrument with penalty
Civil Court Case 02-88-0641
                             Case Name: DIAMOND ALKALI SUPERFUND SITE
File Date: 12/04/1989 Conclusion Date: 11/19/1990
First Defendant (in alphabetical order): CHEMICAL LAND HOLDINGS, INC.
(There were 1 others; use a HIGH detail search to list them.)
Law(s): CERCLA 107A CERCLA 106A
Facility: DIAMOND ALKALI
  Address: 80 LISTER AVE
           NEWARK, NJ 07105
                        Superfund Cost Awarded ($): 1,834,766
Penalty ($):
Judicial District: DNJ Docket Number: 89-5064 (JWB)
Result: Consent instrument with specified cost recovery
______
Administrative Action 02-88-0760 Case Name: ARCHDIOCESE OF NEWARK
Type: TSCA ORDER FOR COMPLIANCE AND PENALTIES
File Date: 03/21/1985 Conclusion Date: 01/29/1986
Defendant: ARCHDIOCESE OF NEWARK
Law(s): TSCA 6A
Violation(s): General facility requirements
Pollutant(s): ASBESTOS
Facility: ARCHDIOCESE OF NEWARK
  Address: NEWARK, NJ 07102
Penalty ($): 12,000 Superfund Cost Awarded ($):
Result: Consent instrument with penalty
Administrative Action 02-88-0773 Case Name: CITY ELECTRIC
Type: TSCA ORDER FOR COMPLIANCE AND PENALTIES
File Date: 11/10/1981 Conclusion Date: 04/26/1982
Defendant: CITY ELECTRIC
Law(s): TSCA 6E
Violation(s): General facility requirements
Pollutant(s): PCB
Facility: CITY ELECTRIC MOTOR CO
 Address: NEWARK, NJ 07102
Penalty ($): 900 Superfund Cost Awarded ($):
Result: Consent instrument with penalty
Administrative Action 02-88-0777 Case Name: CONOCO INC D/B/A PITT-CONSOL C
Type: TSCA ORDER FOR COMPLIANCE AND PENALTIES
File Date: 02/29/1984 Conclusion Date: 10/25/1984
```

Defendant: CONOCO INC D/B/A PITT-CONSOL C

Law(s): TSCA 6E

Violation(s): General facility requirements

Pollutant(s): CCB

Facility: QUPONT CHEMICALS - PITT CONSOL

DAArece. MEWADK MIT

http://www.rtk.net/ix-b...PE=T+Text&EMAIL=&ESUBJ= NEWARK, NJ 07114 Penalty (\$): 25,000 Superfund Cost Awarded (\$): Judicial District: DNJ Docket Number: 90-2287(HLS) Result: Consent instrument with penalty File Date: 12/04/1989 Conclusion Date: 11/19/1990 First Defendant (in alphabetical order): CHEMICAL LAND HOLDINGS, INC. (There were 1 others; use a HIGH detail search to list them.) Law(s): CERCLA 107A CERCLA 106A Facility: DIAMOND ALKALI Address: 80 LISTER AVE NEWARK, NJ 07105 Superfund Cost Awarded (\$): 1,834,766 Penalty (\$): Judicial District: DNJ Docket Number: 89-5064(JWB) Result: Consent instrument with specified cost recovery \_\_\_\_\_\_ Administrative Action 02-88-0760 Case Name: ARCHDIOCESE OF NEWARK Type: TSCA ORDER FOR COMPLIANCE AND PENALTIES File Date: 03/21/1985 Conclusion Date: 01/29/1986 Defendant: ARCHDIOCESE OF NEWARK Law(s): TSCA 6A Violation(s): General facility requirements Pollutant(s): ASBESTOS Facility: ARCHDIOCESE OF NEWARK Address: NEWARK, NJ 07102 Penalty (\$): 12,000 Superfund Cost Awarded (\$): Result: Consent instrument with penalty Administrative Action 02-88-0773 Case Name: CITY ELECTRIC Type: TSCA ORDER FOR COMPLIANCE AND PENALTIES File Date: 11/10/1981 Conclusion Date: 04/26/1982 Defendant: CITY ELECTRIC Law(s): TSCA 6E Violation(s): General facility requirements

Pollutant(s): PCB

Facility: CITY ELECTRIC MOTOR CO Address: NEWARK, NJ 07102

Penalty (\$): 900 Superfund Cost Awarded (\$):

Result: Consent instrument with penalty

Administrative Action 02-88-0777 Case Name: @@NOCOMENCO D/B/A PITT-CONSOL C

Type: TSCA ORDER FOR COMPLIANCE AND PENALTIES

File Date: 02/29/1984 Conclusion Date: 10/25/1984

Defendant: CONOCO INC D/B/A PITT-CONSOL C

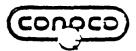
Law(s): TSCA 6E

Violation(s): General facility requirements

Pollutant(s) PCB

Facility: DUPONT CHEMICALS - PITT CONSOL

Address NEWADK N.T 07105



Pttt-Consol Chemicals Conoco Inc. 191 Doremus Avenue Newark, NJ 07105 (201) 344-3800

August 25, 1983 Leilly Industries

Hr. Fred Haber
US/EPA
District II
Woodbridge Avenue
Edison, New Jersey 08837

SUBJECT: PERSONNEL CONSOLD

On July 27, 1983, representatives of Pitt-Consol Chemical Company met with you and Art Gevirtz to discuss the use of PCBs in the heat transfer oil systems at the Newark Plants. We also discussed our unexpected discovery of PCBs in a feedstock storage tank at the plant? The purpose of this letter is to report to EPA our findings on both the heat transfer oil systems and the tank.

### **HEATERS**

As we discussed on July 27, the Pitt-Consol plant had, at one time, three hot oil heat transfer systems containing PCBS. These sytems are designated Heater B-581, Heater B-582, and the Alkylation Heater (B-401).

Our records indicate that Heater B-581 contained approximately 2000 gallons of Therminol FR-2 until 1968 when it was replaced with a non-PCB oil, Therminol-66. In 1970, based upon a change in plant processes, Heater B-581 was shut down and drained of Therminol-66. Heater B-581 has remained out of service since the 1970 shutdown.

Heater B-582 contained Therminol FR-2 until 1972 when It was replaced with Terminol-66. B+582 contained 850 gallons of oil. On May 23, 1983, B-582 was taken out of service. The Therminol-66 was drummed and sent to the Conoco Chemicals plant in Baltimore, Maryland for use in their hot oil system.

calthough we have found no records confirming the exact date, we believe the Alkylation Heater Therminol-FR-2 was replaced with non-PCB Therminol-66 ein-19723. The Alkylation system contained approximately 400 gallons of Therminol-66. On May 2, 1983, shortly before the Plant shutdown, the Alkylation Heater was drained and removed from service.

Our records indicate that Heater B=582 and the Alkylation Heater oil were analyzed for PCBs in December, 1978 by Conoco's laboratory in Ponca City, Oklahomas The Clab report shows no PCBs detected but states that the detection level was 100 ppm. In August, 1980, oils from Heater B-582

and the Alkylation Heater were again analyzed by the Ponca City laboratory and found to contain no-more than 32 ppm PCBs: Copies of these documents were provided to you in our July 27 meeting.

As additional confirmation of these findings, the Baltimore Plant sent three samples of the druns containing oil from Heater B=582 to a commercial laboratory in Baltimore, Gascoyne Inc. Gascoyne's results were 38 ppm; 60 ppm, and 60 ppm PCBs. PPA Region 11, Region 111, and the State of Maryland were all notified of the results. Maryland sent a representative to the Plant to obtain samples from each of the 10 drums involved. On July 20, 1983, the samples obtained by Maryland were split with the Plant. Both the State and Gascoyne analyzed the samples from each drum. Allie of drums showed less than 50 ppm PCBs according to both the State's (see a Attachments) and Gascoyne's analyses.

Finalty, in June of this year, samples of oils remaining in the piping from the ster B-581, Heater B-582, and Alkylation Heater were sent to Environmentally Jesting and Gentification Corporation ("ETC") in Edison, New Jersey, for PCB analysis. The Alkylation Heater and B-582 oils showed less than 10 ppm PCB3. Two analyses of B-581 residue oils howed 56 ppm and 148 ppm PCB3. As a result of these analyses, PCB labels were placed on B-581 and deconstantion of the system was completed on August 17, 1983. The decontamination contractor, Total Chem Services, of Folcroft, Pennsylvania, obtained samples of the B-581 flushings, which were analyzed by SCA and determined to contain less than 1 ppm PCBs.

In summary, by no later than August 1980 both the B-582 and Alkylation Heaters were shown to have contained less than 50 ppm PCB. As discussed above, the B-581 Heater was drained and taken out of service due to a change in processes in 1971 but continued to have value and was not intended for disposal. Given that the drained B-581 heater was never used as a heat transfer system after the effective date of 40 CFR Section 761.30 (d), no analyses for PCB were required under the conditional use provisions of the regulations. Similarly, given that the drained B-581 heater was not considered to be "using PCBs" under the provisions of 40 CFR Section 761.40 (a) (8), no marking requirements were considered to be applicable.

### TANKS

On June 15, 1983, the Pitt-Consol facility began final cleanup of all raw materials, products, by-products, wastes, and residues in tanks or equipment at the site in accordance with federal and state requirements. The waste cleaning and disposal contractor, SCA Services, Inc., began disposal—at the SCA Model City, New York landfill with two loads of solidified feed-stock material from Tank 13 on June 23, 1983. No-analysis for PCB waste conducted on the solidified material prior to-disposal—since—Pitt-Consoluted no reason to suspect contamination of the Tank 13 feedstock.

SCA also obtained samples for analysis of the liquid portion of the same tank wastes which were sent to SCA's Newark treatment facility on June 23.

The liquids analysis initially indicated 5 ppm PCBs. However, screening analysis of another liquid truck trailer liquids showed over 100 ppm PCBs.

SCA notified Pict Consol on July 1, 1983 that it was returning the truck trailer containing tank wastes because it had detected PCBs over 100 ppm.

On July 5, 1983, Pitt-Consol immediately initiated a feedstock tank sampling program with SCA and contracted with SCA for analysis. On July 11, 1983, analysis of a sample sent to ETC to verify SCA's results indicated Tank 13 contained PCBs at a level of 1150 ppm and aroused suspiction that PCBs may be in other tanks. A total of ten tanks were considered potentially involved. All ten tanks have now been sampled and analyzed. Only Tank 13 contained PCBs above 50 ppm. Copies of the canalyses are attached?

Once Pitt-Gonsol-became aware of the presence of PCBs, all tanks and was trailers on site containing tank wastes with over 50 ppm PCBs were marked and dated. A temporary PCB storage area was established for the five tanks trailers of liquids being held on site pending analysis. The SPCC plan was amended to recognize the temporary PCB storage area. (See Attachment.) Further, the diked area around Tank 13 was immediately closed and all rain water thereafter contained within the diked area analyzed to confirm that the rainwater had no PCB contamination prior to discharge.

Since that time, the trailer contents were transferred to tanks covered by the Plant's SPCC plan as you recommended in our July 27 meeting. The PCB material will be transported via rail to an approved PCB incineration facility.

Our investigation of the tank contamination problem led us to examining past activities involving Tank 13. A number of the feedstock tanks previously had water layers containing low concentrations of dissolved cresols (i.e. carbolate water). In approximately August, 1982, it was determined that the carbolate water was unlikely to ever be economically attractive for processing. The water layers were then consolidated in Tank 13 and trucked to the RCRA permitted Unitank Marine Terminal in Philadelphia. The carbolate water was then shipped via ocean tanker to Empak, Inc., in Deer Park, Texas for deep well injection. Samples of the carbolate water were retained at the Pitt-Consol Plant. ETC analysis of this material shows less than 50 ppm PCBs in the carbolate water, below regulated levels.

From the start of the job, SCA has had its workers in full protective gear including contained fresh air. No additional personnel protection procedures were deemed by SCA to be required because of the PCBs. However, SCA personnel are fully aware that PCBs are present and have so informed their workers. We remain ready to discuss this situation and will keep you informed of all significant events. Please give us a call if you would like to discuss these matters further or need additional information.

Mr. Fred Haber

Page Four

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August 25, 1983

Sincerely,

H. Garrison Plant Manager

HG:tls

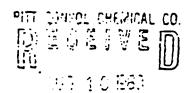
cc: Bruce Venner N. J. Dept. of Environmental Protection Division of Waste Management

120 Rt. 156

Yardville, N. J. 08620

### SCA CHEMICAL SERVICES COMPANY

107 Albert Avenue Newark, New Jersey 07105 (201) 465-9100





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August 8, 1983

Mr. David Hollis
Process Superintendent
PITT-CONSOL CHEMICALS
Conoco Inc.
191 Doremus Avenue
Newark, NJ 07105

Ref: PCB Testing Data

Dear Mr. Hollis:

This letter will outline data for PCB Testing of samples of liquid waste in tanks and tankers at the Pitt-Consol Chemicals' Newark plant. The following data was compiled from testing that was conducted in June and July.

<u>Date</u>	Sample Source	Cone. (ppm)
7/1/83	Tank 13	<b>⇒300_ppm</b> →
7/5/83	Tank 21	<b>≟</b> _5:0≕ppm®
7/7/83	Tank 1	5:0==ppm≥=
7/13/83	Tank 16	<_5:0ppm
7/26/83	Tank 16 core	
6/23/83	Tank 22	⊂ <del>Unconfir</del> med=>
		_(interference)
7/13/83	Tank 22	_Unconfirmed_
		(interference)
7/25/83	Tank 22 (2)	None-destrected
7/25/83	Tank 8	None detected
7/25/83	Tank 3	None detected
7/14/83	Tank 4	None detrected
7/14/83	Tank 5	None detected
7/12/83	Tanker 119	<b>≪</b> 50 ppm
7/14/83	Tanker 106	≥500 ppm=
7/5/83	Tanker 141	<b>~500</b> ppm⊛
7/15/83	Trench water	- I ppm
7/26/83	Trench water	-None detected -

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13	PPU SPRINGUALE PA		1.00	1/								•						1006335
- -	PARENT CUST. TUT-PITTS PEATE GE		31.0	<del></del>														-1004334
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1 3	REICHIULD CHEH NIA FALLS NY				1.20			1-20		<u></u>								1003719
1	PARENT CUST. TOT-REICHHOLD CHEM		21.6		3.60		2.40	1.20										0004571
																		0015131
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25.	REYNOLDS HETALS HESSENA NY		6.00		12.0			12.0								<u> </u>		1006779
13.			1.20											·	٠,	'		0015227
45			-600															-1006620
╀	PARENT CUST. TOT-RIEGEL PAPER NY		1.20															0004518
L	PARENI COSI. IDI-RIEGEL PAPER NI		1.20			•		· .			•	•	•	•				
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l; J : 27 /	GLIDDEN DURKEE JACKSCHVILLE FL	ļ	6.00		•					·	1	- 1				]		00165239
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NEWARK, NJ 07114 Penalty (\$): 25,000 Superfund Cost Awarded (\$):

Judicial District: DNJ Docket Number: 90-2287 (HLS)

Result: Consent instrument with penalty

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Civil Court Case 02-88-0641 Case Name: DIAMOND ALKALI SUPERFUND SITE

File Date: 12/04/1989 Conclusion Date: 11/19/1990

First Defendant (in alphabetical order): CHEMICAL LAND HOLDINGS, INC.

(There were 1 others; use a HIGH detail search to list them.)

Law(s): CERCLA 107A CERCLA 106A

Facility: DIAMOND ALKALI Address: 80 LISTER AVE NEWARK, NJ 07105

Superfund Cost Awarded (\$): 1,834,766 Penalty (\$):

Judicial District: DNJ Docket Number: 89-5064(JWB) Result: Consent instrument with specified cost recovery

Administrative Action 02-88-0760 Case Name: ARCHDIOCESE OF NEWARK

Type: TSCA ORDER FOR COMPLIANCE AND PENALTIES

File Date: 03/21/1985 Conclusion Date: 01/29/1986

Defendant: ARCHDIOCESE OF NEWARK

Law(s): TSCA 6A

Violation(s): General facility requirements

Pollutant(s): ASBESTOS

Facility: ARCHDIOCESE OF NEWARK Address: NEWARK, NJ 07102

Penalty (\$): 12,000 Superfund Cost Awarded (\$):

Result: Consent instrument with penalty

Administrative Action 02-88-0773 Case Name: CITY ELECTRIC

Type: TSCA ORDER FOR COMPLIANCE AND PENALTIES

File Date: 11/10/1981 Conclusion Date: 04/26/1982

Defendant: CITY ELECTRIC

Law(s): TSCA 6E

Violation(s): General facility requirements

Pollutant(s): PCB

Facility: CITY ELECTRIC MOTOR CO Address: NEWARK, NJ 07102

Penalty (\$): 900 Superfund Cost Awarded (\$):

Result: Consent instrument with penalty -------

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Administrative Action 02-88-0777 Case Name: CONOCO INC D/B/A PITT-CONSOL\_C.

Type: TSCA ORDER FOR COMPLIANCE AND PENALTIES

File Date: 02/29/1984 Conclusion Date: 10/25/1984

Defendant: CONOCO INC D/B/A PITT-CONSOL C

Law(s): TSCA 6E

Violation(s): General facility requirements

Pollutant(s): RCB

Facility: DUPONT CHEMICALS - PITT CONSOL

Address NEWARK M.T 07105

# NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION HAZARDOUS WASTE FACILITY ANNUAL REPORT - PART I

1.	CALENDAR YEAR COVERED 1983
2.	FACILITY'S NAME PITT-CONSOL CHEMICAL COMPANY
Э.	EPA ID NONJD 004948188
4.	MAILING ADDRESS 191 DOREMUS AVENUE
	NEWARK, NJ 07105
5.	STREET ADDRESS OF FACILITY
6.	FACILITY CONTACT DAVID HOLLIS PHONE NUMBER 201-344-3800
7.	CLOSURE COST ESTIMATE \$ 27,570
8.	POST-CLOSURE COST ESTIMATE (if applicable) \$
9.	CERTIFICATION STATEMENT
	"I certify under penalty of law that I have personally examined and am familar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties under N.J.S.A. 13:1E-1 et seq. for submitting false information, including the possibility of fine and imprisonment".
•	DAVID HOLLIS David Hollis 2/15/84
	Print of Type Name Signature Date

# NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION HAZARDOUS WASTE FACILITY ANNUAL REPORT - PART I

## 10 F. Quantity of each waste type treated, stored or disposed of at the facility:

LINE	· · · ·	)NJDEP H		c)HANDLING	d) AMOUNT OF	•
NUMBER 1.	OF WASTE Cresylic Acid Waste	WASTE N	-054	METHOD SO1	WASTE 30.99	UNITS T
2.	Corrosive Liquid, N.O.S.		002	S02	.452.09	T
3.	Waste Fuel Oil, No.4	D	001	<b>S</b> 02	141.48	T
4.	Corrosive Solid, N.O.S. (Contaminated w/up-to-1600 ppm 1		002	SO1	119.12	Ţ
5.	Corrosive Liquid, N.O.S. (Contaminated w/up to 1600 ppm l	D	002	S02	72.25	T
6.	Corrosive Solid, N.O.S. (Glothing & rags contaminated wind RCB & Cresylics)	D	002	S01	17.56	T
7.	Sulfuric Acid, Spent	D	002	S01	3.6	T
8.	Soil contaminated with disulfid	les D	002	<b>S</b> 01	6.1	T
9.	Solids contaminated with cresol	s U	052	<b>S</b> 01	3.6	T
10.	Hazardous Waste (Fuel Oil)	X	725	<b>S</b> 01	2.0	T
11.	Thiocresol Solid	D(	002	\$01	320.0	P
12.	Thiophenol Solid	P	014	<b>S</b> 01	1435.0	P
13.	Non-Hazardous Waste			\$01	2.5	T

# NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION HAZARDOUS WASTE FACILITY ANNUAL REPORT - PART I

J G. Total quantities of each waste type consigned to each treatment, storage or disposal process:

LINE NUMBER	HANDLING METHOD		NJDEP HAZARDOUS WASTE NUMBER	AMOUNT OF WASTE	UNITS
1.	S01	Cresylic Acid Waste	<b>U</b> 054	30.99	T
2.	<del></del>	Corrosive Solid, N.O.S. (contaminated with up to 1600 ppm PCB)	den D002	119.12	T
3.		Corrosive Solid, N.O.S. (clothing & recontaminated with PCB & Cresylics) &	ngs D002	17.56	T
4.		Sulfuric Acid, Spent	D002	3.6	T
5.	<del></del>	Soil Contaminated with disulfides	<b>D</b> 002	6.1	T
6.		Solids contaminated with cresols	U052	3.6	T
7.	· · · · · · · · · · · · · · · · · · ·	Hazardous Waste (Fuel Oil)	<b>X</b> 725	2.0	T
8.	· · · · · · · · · · · · · · · · · · ·	Thiocresol Solid	D002	320.0	P
9.	· · · · · · · · · · · · · · · · · · ·	Thiophenol Solid	P014	1435.0	P
10.		Non-Hazardous Waste	<b>44</b>	2.5	T
11.	S02	Corrosive Liquid, N.O.S.	D002	452.09	T
12.	<del> </del>	Waste Fuel Oil, No. 4	D001	141.48	T
3.		Corrosive Liquid, N.O.Sc (contaminated with up-to-1600 ppm=PCB)	D002	72.25	T

# NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION HAZARDOUS WASTE FACILITY ANNUAL REPORT - PART II

۸1.	FACILITY EPA ID #	IJD 004948188	: 		
12.	GENERATOR NAME PITT-CONSOL (	CHEMICAL COMPANY	- ON-SITE		
13.			VII 0114		
13.	NEWARI	REMUS AVENUE  O7105			<del></del>
	NEWARI	, NS 0/103			
1/	GEVERATOR ERI INS				
14.	GENERATOR EPA ID#				
15.	WASTE IDENTIFICATION				
LINE	a) DESCRIPTION	L\ NIDED HAZADI	DOUG A HANDITNE A)	AMOIDET OF	۵)
NUMBE		WASTE NUMBER	DOUS c) HANDLING d) R METHOD	WASTE	e) UNITS
1.	Waste Corrosive	D002	Disposed	770.51	T
	Solid, N.O.S.		off-site	,,,,,	-
2.	Cresylic Acid Waste	U-054	SO1/Disposed	30.99	T
			off-site		
3.	Corrosive Liquid, N.O.S.	D002	Disposed off-site		T
			S02	452.09	<u>T</u>
4.	Waste Fuel Oil, No.4	D001	Disposed off-site		T
			S02	141.48	<u>T</u>
5.	Corrosive Solid, N.O.S.	D002	Disposed off-site		T
	(Contaminated=with=up=to		S01	119.12	T
6.	Corrosive Liquid, N.O.S.		Disposed off-site		T
	(Contaminated=with=up=to		S02	72.25	T
7.	Corrosive Solid, N.O.S.		S01	17.56	. <b>T</b>
	(Clothing-&-rags-contami		-Cresylics)		
В.	Crude Cresylic Acid	D001	Disposed off-site	16.24	T
9.	Sulfuric Acid, Spent	D002	Disposed off-site	8.5	
7.	_ Sulfuffe Acid, Spelle	DOOL	SO1	3.6	Ť
10.	Soil contaminated with	D002	S01	6.1	
	disulfide	. 2002	302	0.1	•
11.	Solids contaminated with	<b>U</b> 052	S01	3.6	T
	cresols	•••-		• • •	•
12.	Potassium Nitrate with/	D001	Disposed off-site	42.0	T
	Sodium Nitrite		·		
13.	Hazardous Waste (Fuel Oi	1) <b>X</b> 725	SOl/Disposed	2.0	T
	·		off-site		-
14.	Thiocresol Solid	D002	SO1/Disposed	320.00	· P
			orr-site		
15.	Thiophenol Solid	P014	SO1/Disposed	1435.00	P
			off-site		
16.	Non-Hazardous Waste	· · · · · · · · · · · · · · · · · · ·	SOI/Disposed off-sit	e 1.8	T



C1131-A DIRECT #2 C1/39/73

# PICC SPECIALTY PROBUCTS PRODUCT/CUSTCALE SALES REPORT

FOR DEC 1972

PAGS :

-IN THOUSANDS OF POUNDS AND COLLA	IRS.	R S-
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	NAME OF PRODUCT/CUSTOMER	POTENTIAL	\$A51 V\$ 4.8 * R11.5	CACOUS	EUED VID	JAN	FEB.	MAR.	APR	MAY	JUNE	JULY	AUG.	SEP1.	oct.	NOV.	DEC	MC1 242 21
	THERSTROL FR-1													-		003:	JA	1043-245-
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Ashland Chemical Company



Law Department Stephen W. Leermakers Senior Litigation Counsel (614) 790-4261 Ashland Chemical Company Division of Ashland Inc.

Address Reply: P.O. Box 2219 Columbus, Ohio 43216 Fax: (614) 790-4268

## VIA FEDERAL EXPRESS

January 11, 1996

95 JMN 12 PH 1: 53 DIRECTOR'S SEFIC

Mr. Lance Richman, P.G. Emergency and Remedial Response Division U.S. Environmental Protection Agency 26 Federal Plaza, Room 13-100 New York, NY 10278

RE: Supplemental Response to Request for Information for the Diamond Alkali

Superfund Site, Passaic River Study Area.

Dear Mr. Richman:

The following is a supplemental response to the Request for Information directed to Ashland Chemical Company, a division of Ashland Inc. ("Ashland"). Ashland has located additional information responsive to the earlier Request for Information directed to Ashland, and responded to by Ashland on February 20, 1995.

### Supplemental Response to Question 6.

- a) For process waste waters generated at the facility which contained any hazardous substances, including, but not limited to, the substances listed in response to item (3) and (4).
- i) Did the waste stream connect to a sanitary sewer and if so, during what years.

Response: Ashland has continued to investigate what substances may have been at the 400 Doremus Avenue facility. A present employee of Ashland Chemical Company, who worked at the Doremus Avenue facility during part of the year of 1978, has indicated that process waste water may have been released directly into the Passaic Valley Sewer System. He does not know the exact composition of the process waste water. Any substances that may have been in the process waste water would have been in parts per million. It is not known what years the process waste water may have been released to the sewer.

Quality and Productivity



### Ashland Chemical Company

DIVISION OF ASHLAND DIL INC.

P. O. BOX 2219, COLUMBUS, OHIO 43216 . (614) 889-3333

ENGINEERING DEPARTMENT R. O. Spooner Director of Engineering

October 2, 1986

Passaic Valley Sewerage Commissioners 600 Wilson Avenue Newark, NJ 07105

Attention: Mr. Vincent Olivio

Industrial Department

Reference: Sewer Permit Renewal

Ashland Chemical Company

221 Foundry Street Newark, NJ 07105

Dear Mr. Olivio:

The application for renewal of our sewer permit is attached. Discharge to the sewer system is approximately 2,300 gpd. The sanitary sewer outlets account for 2,000 gpd. The balance of the discharge is from the two groundwater monitoring wells and the neutralization pit (Outlets 20403791 and 3792).

The analytical results of waste water analysis indicate that the pretreatment systems (oil separators and hydrocarbon monitors) for the groundwater monitoring wells are performing well. Oil and grease were nondetectable and BOD, COD, and TOC were low. The TTVO for one outlet (20403791) measured 60 ppm and was nondetectable for the other (20403792). The combined average daily flow from these outlets is 300 gallons.

If you have any questions or comments about the application, please call Bill Elsasser at 201/344-3334 or Eldon Ronning at 614/889-4670.

Your cooperation and understanding with respect to our late filing has been appreciated.

Sincerely,

Tag Goodwin District Manager

TG:dli Attachment

bc: W. Elsasser\*

E. Papson\*
G. W. Hammer
ROS/RCS\*/EER/RMA

AAJ001004

Ashland's Commitment to Guality and Productivity

932500139

## TABLE 1 EPA PRIORITY POLLUTANTS (CONTETUEL)

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### Siste of New Jersey

### DÉPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF HAZARDOUS WASTE MANAGEMENT

LANCE R. MILLER, DIRECTOR

CN 028 Trenton, N.J. 08625-0028 (609) 633-1408 Fax # (609) 633-1454

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1983 1991

### MEHORANDUH

TO:

Linda Grayson, Chief

Bureau of Planning and Assessment

FROM:

Doug Stuart, Acting Chief

Bureau of Compliance and Technical Services

SUBJECT:

Responsible Party Investigation

Foundry Street Complex

(AKA Arkansas Chemical, Hummel Chemical)

185 Foundry Street, Newark, NJ

The Bureau of Compliance and Technical Services' Special Investigation Section has prepared the attached Responsible Party Investigation Summary for the subject case to assist the Bureau of Planning and Assessment in its site evaluation.

Please be advised that referenced key documents are maintained in this bureau's files. Should you have any questions in this matter, do not hesitate to contact me at (609) 633-0708.

lmc

P. Smith, Investigator, SIS/BCTS
B. Patterson, ECRA

RPIU File

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# FOUNDRY STREET COMPLEX ARA ARKANSAS CHEMICAL AND HUMBEL CHEMICAL

### SUMMARY

The Foundry Street Complex consists of six separate parcels of land, Lots 4 (Block 5005); Lot 5 (Block 5005); Lot 6 (Block 5005); Lot 10 (Block 5005); Lot 21 (Block 5005); and Lot 22 (Block 5005), see Attachment 1. The site is located in the Iron Bound Section of Newark and is situated between Foundry Street on the east, the former Manufactures Railroad on the west, and Roanoke Avenue on the north. Bordering the southern portion of the site is the New Jersey Turnpike.

Approximately 30 small buildings are situated throughout the complex. The buildings are separated by narrow driveways which have strip-like drains in the middle of the lane. These drains are connected to an industrial sever line on Roanoke Avenue and receive surface water run-off and industrial discharge from companies in the complex. The complex is easily accessible from numerous locations.

Historically, the Foundry Street Complex has been occupied by a variety of chemical manufacturing industries. One of the first known companies associated with the site was Central Dyestuff and Chemical Company (CDC), a New Jersey Corporation. CDC acquired the property in three different portions from Waldron Brothers Realty Company, Hunicipal Investment Company, and part of the premises known as Plum Point Lane duly vacated by the City of Newark. CDC manufactured color specialties which included oranges, fast reds, scarlets, browns, chrysoidine blacks, oil soluble colors, and a large variety of colors and dyes used for cakes, varnishes, inks, stains, straw, leather, etc.

On August 13, 1930, Central Dyestuff and Chemical Company merged with Consolidated Color and Chemical Company (CCC). The latter name was retained by the new corporation which continued to operate on site.

In January of 1936, Arkansas Company, Inc., a New York Corporation, executed a three year lease for space in buildings designated as #16, #24, #26, #27, #28, #32 and #35 with CCC. Consolidated Color and Chemical gave Arkansas the sole right and option to purchase the demised property. However, this option expired on October 31, 1938. After executing the lease with Arkansas, CCC changed their name to H.A. Hetz & Company Inc., a New Jersey Corporation, on March 2, 1936. H.A. Hetz & Company name was changed to Roanoke, Inc., a New Jersey Corporation, on May 24, 1937.

In January, 1939, Roanoke, Inc. sold the property which now consists of Lots 4, 5, 21 and 22 to Chemical Industries, Inc. for a sum of \$10.00.

Prior to the sale of the premises, a ten year lease which became effective February 1, 1939, was negotiated between Arkansas Company, Inc., Chemical Industries, Inc. and Roanoke Inc. Arkansas Company's new lease still contained the right and option to purchase the premises which expired on November 1, 1943. Apparently, Arkansas and Chemical Industries, Inc. had negotiated the sale of the property before the November 1 deadline. The

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sale was finalized on December 27, 1943. The Newark Tax Hap now designates this property as Lot 5 (Block 5005).

#### ARKANSAS COMPANY, INC.

Arkansas Company, Inc. (Arkansas Chemical) manufactured textile chemicals at the facility which included chelating agents, dye carriers, emulsifying agents, fire retardants, fungicides, resin finishes and water repellents.

In 1975, Arkansas was issued a Notice of Violation (NOV) by the U.S. EPA, Region II, for failure to implement a Spill Prevention Control and Countermeasure Plan for a 20,000 gallon storage tank containing No. 6 fuel oil. It is not known if any penalties were assessed against Arkansas for the violation.

Arkansas Chemical sold the property (Lot 5) to Galaxy, Inc. on February 23, 1978, but continued to operate on the premises as a tenant. The City of Newark foreclosed upon the property, for unpaid taxes, in September of 1983. Both Arkansas and Galaxy, Inc. subsequently filed for bankruptcy, under Chapter 11, in the United States Bankruptcy Court for the District of New Jersey.

Sometime thereafter, Arkansas Chemical ceased operations at the facility. NJDEP personnel discovered approximately 250 abandoned 55 gallon drums on the property during a site inspection on April 30, 1984. Labels found on the drums indicated that they contained benzene chloride, perchloroethylene, methanol, silane, isophorondiisocyanate, lactic acid and polyethylene glycol. Some of the drums were noted leaking their contents. Oil spillage was discovered on the rear portion of the property where open containers of petroleum products were stored.

The Division of Waste Management (DWM) issued a Directive Letter to Arkansas on September 21, 1984. Arkansas was directed pursuant to the Spill Compensation and Control Act, to immediately initiate remedial measures at the site which included: Securing access onto the site; listing all materials stored on site within fourteen days upon receipt of the directive; and properly removing and disposing of all containers and contaminated soil in accordance with Department regulation.

Howard S. Greenberg, registered agent for Arkansas, informed the NJDEP by letter dated October 3, 1984, that remedial contractors were being sought. A supplemental letter dated October 23, 1984, provided the names of potential contractors which included: Atlantic Remedial Constructors, Inc., Clean Venture, Inc. and Rollins Field Service, Inc. The letter also stated that Elson T. Killian Associates had been hired to oversee cleanup activities. A cleanup proposal was submitted by Clean Venture, Inc. in November, 1984.

Approximately 500 additional drums were discovered in building No. 28 during a subsequent inspection. Many of the drums were labeled for corrosive, flammable and poisonous materials. An unspecified number of five gallon pails were also found in an outdoor shed.

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The United States Bankruptcy Court authorized funds to secure the drums. On January 3, 1985, Cycle Chem commenced cleanup operations by moving drums located in the outside yard into building No. 28A. This phase of the cleanup was completed on the following day. No further actions were taken in this response.

CWC Realty Company made a "contract of sale" for Lot 5, with Galaxy, Inc. on May 10, 1985. The sale of the property never occurred due to a potential costly cleanup.

In 1986, the City of Newark took steps to secure the buildings of Arkansas Company, Inc. Such efforts proved to be ineffective. Vandals routinely broke into the buildings and were responsible for a fire which occurred at the facility. The buildings on the property began to deteriorate due to leaks in the roof. This allowed rain to enter the buildings and caused drums stored inside to corrode and release their contents.

The USEPA Region II Technical Assistance Team took control of the Arkansas Chemical facility in January, 1987. A cleanup commenced shortly thereafter and continued over the next two years. By February 2, 1989, all hazardous materials which consisted of base neutrals compounds, acids, cyanides, flammables, peroxides, halogenated organics, oxidizers and organics were removed from the facility. EPA's response did not include remediation of contaminated soils and ground water.

#### LOT 4, BLOCK 5005

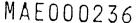
Kem Realty Company purchased Lot 4 (Block 5005), 96-144 Roanoke Avenue, from Chemical Industries Inc. on May 8, 1962. The City of Newark subsequently approved a subdivision of the lot on January 6, 1964. Approximately 0.87 acres was taken from the northeast corner of Lot 4 and designated as Lot 21 (Block 5005).

## HUMMEL LANGLIN CORPORATION

Hummel Lanolin Corporation (HLC), a wholly owned subsidiery of Croda Inc., EPA ID #NJD002175016, manufactures lanolin and lanolin derivatives used as formulation aids for the cosmetic industry. HLC began operating on the property as a tenant in the late fifties.

On February 28, 1964, Hummel Lanolin purchased Lot 21 from Kem Realty. The property contained a single building that was built in 1947 by Chemical Industries, Inc. Apparently, this building was once used to store food and flavor ingredients by Masehmeirer Aromatics, before it was occupied by HLC. In 1964, a warehouse was constructed and an extension was made to this warehouse in 1969-1970.

HLC blended mixtures of lanolin and lanolin derivatives with mineral oils, paraffin waxes, fatty acids, and alcohols. The manufacturing of lanolin involved four stages. Wool grease was first heated until it became a liquid and sodium chloride, citric acid, and trisodium EDTA were then added. Next, hot water was sprayed over the mixture which settled overnight. Fatty acids contained in the mixture were neutralized with isopropanol, soda ash, and caustic soda solution. The mixture was then aggregated and allowed to



settle overnight once again. Upon completion of this process, the product was ready for washing and bleaching. In this stage, soap stock and interface used to clean the lanolin were drawn off the mixture and pumped to a tank for subsequent treatment. The remaining grease was washed a second time to remove any residual soap and allowed to air dry. A hydrogen peroxide solution was then used to bleach the wool grease.

Soap stock and wash water generated from the manufacturing process were neutralized with either sulfuric acid or hydrochloric acid to free water insoluble fatty acids. The fatty acids would float to the surface and the remaining acid solution was pumped to another tank where it was neutralized with caustic soda or soda ash to a pH of 5.5. The neutralization solution was discharged into the Passaic Valley Sewerage Authority. Fatty acids recovered from the neutralization process were recycled in lanolin derivatives.

In September of 1986, Hummel Lanolin Corporation entered into an "Agreement of Sale" of the premises with Custom Foil Company, Division of CWC Industries. The prospective sale of the property activated the Environmental Cleanup Responsibility Act. Consequently, HLC hired Dames & Moore, an environmental consultant, to investigate the property and determine if any potential sources of contamination existed on site. The location of a former underground storage tank was one of the major environmental concerns of the ECRA investigation. Borings made in the vicinity of the tank revealed the presence of petroleum hydrocarbon (PHC) contamination. Soil samples collected at a depth of 5.0 - 5.5 feet contained higher levels of PHCs than samples collected at the base of the tank. Dames & Hoore attributed the contamination to spillage from tank refilling operations. Base neutral compounds (B/N) were also detected in three of the soil samples taken near the tank.

The presence of B/Ns warranted further investigation and a ground water investigation was conducted by Dames & Moore. During the installation of monitoring wells in the area of the former underground storage tank, a black sludge like material was encountered in the location of monitoring well #1. A soil sample collected from a soil boring made near this monitoring well on August 13, 1987 contained volatile organic compounds (VOC), B/Ns, pesticides (i.e. Beta BHC and delta BHC) and priority pollutant metals. Dames & Moore concluded that the contamination was probably due to a leak in the sewer line which passes underneath the property and receives waste from an electroplating company (Automatic Electro-Plating) located upgradient of the sewer line.

Additional sampling was conducted to determine if the contamination was from an on site or off site source. Six soil borings (B1-B6) were made throughout the southwest portion of Lot 21 and one sediment sample was collected from a manhole in the sewer line located upgradient of HLC's process building. The soil samples and sediment sample contained VOCs, metals, and PHC. B/Ns and pesticides (i.e. heptaclor, aldrin, 4-4' DDT) were only detected in the soil samples.

Floor drains in the process building were also investigated as a potential source of contamination. A soil sample (BSW-1) was collected from beneath a floor drain in the southwest corner of the process building in September,

1988. The drain was the closest to where the sludge contamination existed and contained VOCs, B/N and metals below ECRA action levels. The floor drains were determined not to be a source of the sludge material.

A third possible source investigated was Hummel Lanolin's drainage basin. The basin was used to collect effluent samples before being discharged into the industrial sewer system. The basin and pipe connected to the sewer was cleaned out on October 14, 1988. During the clean out, a black liquid flowed into the basin from the industrial sewer line. Dames & Moore collected one sludge sample (WC-1) and one liquid sample (WC-2). Both samples contained VOCs, PHCs and total cyanide. Sulfides and corrosivity were below EPA maximum levels. Sample WC-1 also contained five B/Ns, below method detection limits, and priority pollutant metals (i.e. cadmium, copper, lead and zinc). Similar metals were detected in the upgradient manhole in the main industrial sewer. It should be noted that the drainage basin is located downgradient of the sludge contamination. The sludge contamination was determined to originate from an off site source (i.e. via the industrial sewer).

#### LOT 22, BLOCK 5005

A major subdivision of Lot 4 (Block 5005), was approved by the City of Newark, Central Planning Board, on March 1, 1971. Consequently, Lot 22, 159-169 Foundry Street, was formed from the southern portion of Lot 4. Kem Realty Company conveyed this new parcel containing approximately 1.65 acres to the Foundry Street Corporation on May 3, 1971. The Foundry Street Corporation leases the property to Automatic Electro-Plating Corporation, Sun Chemical Corporation, and Fleet Auto Electric.

# SUN CHEHICAL CORPORATION

Sun Chemical Corporation (Sun), Pigment Division, EPA ID #NJD002458842, manufactures quincridone pigments in buildings #23, #31, #32, #33 and #34 located on the eastern portion of Lot 22 (See Attachment 2). Polychrome Corporation, Cellomer Division, operated here prior to 1967.

Quinacridone pigments are highly colored, insoluble pigments, and range in color from red to violet. The pigments are used in the automobile industry, printing inks, and plastics. Quinacridones are produced by the cyclo dehydration of dianilino-terephthalic acids in polyphosphoric acid.

Sun uses two basic methods to produce red and violet pigments. The red pigment is made by mixing polyphosphoric acid and dianilino-terephthalic acid together and heated, to dehydrate the dianilino-terephthalic acid. The substance is pumped to another tank containing water and the slurry produced is heated under reflux, then pumped through a filter press where the crude pigment is collected. Effluent from the press which consists mainly of phosphoric acid, is pumped to a storage tank for subsequent removal off site. The crude pigment is refluxed a second time with glacial acetic acid and the finished product is pumped to a filter press for collection. Spent acid generated from this process is pumped to a tank where it is neutralized with caustic sods and discharged to the Passaic Valley Sewerage Commission.

In producing violet pigment, polyphosphoric acid and dianilino-terephthalic acid are mixed together and heated, to dehydrate the dianilino-terephthalic acid. The remaining material is added to methyl alcohol and refluxed for several hours. Water is added and the mixture is distilled to recover some of the alcohol. The alcohol is later reused.

The mixture is pumped to a filter press where the pigment is collected. Effluent generated from the process, consisting of alcohol and phosphoric acid, is pumped to a neutralization tank for treatment with caustic soda. ifter the pH is adjusted, the effluent is discharged into PVSC. Hagenta pigments are made the same way except 2,5-di-p-toluidino-teraphthalic acid or 2,5-di-(p-chloroanilino) telepathic acid is used as the starting material.

Originally, Sun Chemical was identified as a hazardous waste generator and TSD facility on their RCRA Part A application. TSD activities included storage in tanks (SO2) and treatment in tanks (TO1). In April of 1988, the Bureau of Hazardous Waste Engineering (BHWE) delisted the company's status to a generator only since waste were no longer stored on site for more than 90 days.

Sun is classified as a Industrial Waste Hanagement Facility (IWMF) under the New Jersey Water Pollution Control Act, due to the on site neutralization of waste. Caustic soda is used to neutralize process effluent in two interconnected 1,500 gallon above ground storage tanks situated between Buildings #23 and #31. The treated effluent is discharged into a sump connected to an industrial sewer located on the adjacent property (Lot 4) owned by Norpak Corporation. Sun discharged its effluent into the strip drainage system located on the west side of the plant before the installation of the waste water treatment unit.

The Passaic Valley Sewerage Commission (PVSC) regulates the discharge under Permit #2040-1042 and requires the pH to be between 5.0 and 10.5. Sun is exempt from obtaining a NJPDES permit because it is considered an elementary neutralization unit. The facility qualifies as an elementary unit since the wastes neutralized are only considered hazardous due to the corrosivity characteristic.

Some of the company's hazardous waste is transported off site to Industrial Solvents in Pennsylvania. Industrial Solvents reclaims the solvent portion of the phosphoric acid and methanol/isopropanol mixture. This is sold back to Sun Chemical.

Sun Chemical Corporation entered an agreement for the sale of the Foundry Street facility with Sun/DIC Acquisition Corporation. In October, 1986, Recon Systems Inc. conducted sampling at the facility as part of a preliminary acquisition survey. Samples consisting of one soil, one sediment, and one swipe sample taken of an oily stain on the boiler room floor. The sediment and soil samples contained VOCs, PHCs, PCBs and priority pollutant metals. PCBs were detected in the swipe sample.

Consequently, both parties signed an ECRA Administrative Consent Order (ACO) on December 30, 1986. The ACO required Sun to install monitoring wells so that ground water quality could be investigated. Recon Systems Inc. collected ground water samples from three monitoring wells throughout the

facility on September 19 and November 10, 1989. The sample results indicated that ground water was contaminated with VOCs, B/Ns, PHCs and priority pollutant metals. The concentrations detected exceeded ECRA action levels. However, the contamination appeared to be coming from an off site source.

As a result of potential off site contamination, five additional monitoring wells were installed at Sun Chemical. Ground water samples were collected from the eight monitoring wells on August 23, 1990. These samples contained elevated levels of VOCs, B/Ns, PHCs and priority pollutant metals.

The DWR, Bureau of Ground Water Control recommended that additional background sampling be conducted to verify off site sources of contamination in March of 1990. Recon Systems Inc. in an attempt to verify such sources, investigated the integrity of the drainage system (strip drains) and sewer system. Video inspection of the sewer system revealed that the sewer lines contained numerous cracks and separations between the pipes. The inspection also noted that the strip drains were connected to the sewer system on Sun's property.

On July 17, 1990, four sediment samples and one water sample was collected from catch basins and the sewer system on the property. The samples contained elevated levels of VOCs, B/Ns, organic acids, cyanides, and priority pollutant metals. Recon Systems Inc. investigative findings concluded that contamination could have migrated onto the facility through the drainage system and leaks in the sewer system.

It was also indicated that reoccurring flooding of the drainage system may have distributed past sources of contamination throughout the facility, resulting in the scattered pattern noted on the premises. Furthermore, "ground water contamination appeared to be a regional problem not directly attributable to Sun Chemical".

## FLEET AUTO ELECTRIC

The western portion of Lot 22 is occupied by Fleet Auto Electric and Automatic Electro-Plating Inc. (AEP). Fleet Auto Electric rebuilds electrical parts (i.e. generators, alternators for cars) in building #29 which is located immediately adjacent, and on the west side of Sun Chemical (See Attachment 2). The company has operated in the building since the early seventies.

#### AUTOMATIC ELECTRO-PLATING CORPORATION

Automatic Electro-Plating (AEP), EPA ID #NJD002445500 conducts an electroplating business in buildings #19, #21 and #22 (See Attachment 2). AEP has occupied these buildings since April, 1971. Tennant Chemical Company once operated in building #21 during the sixties.

The company performs nickel and zinc plating which incorporates two automated methods: RACK (metal parts suspended from racks), building #21, and BARREL (metal parts are placed in a polypropylene barrel) building #22. Both procedures are dipped in the various plating solutions and rinses. AEP

stores their dry chemicals in building #19. The yard south of building #19 is used to store acid carboys.

Several processes are done to prepare the metal parts for plating. The parts are first cleaned with an alkaline solution which is followed by a water rinse. Next, the parts are placed in a mild acid bath for surface activation and once again rinsed with water. From this process, the parts are submerged either in the zinc or nickel solution. The zinc solution consists of zinc chloride, potassium chloride and boric acid. The nickel solution consists of Lickel sulfate, nickel chloride and boric acid. After the plating is completed, the parts are rinsed with water a final time and air dried.

Spent plating solutions are discharged from two outlets into the outside drains surrounding the production building. The drains flow to a sewer connection located near the northeast corner of building #21. Prior to discharge, the pH of the effluent is adjusted (neutralized) in house before it is released to the Passaic Valley Sewerage Commission (PVSC) which regulates the discharge under permit #2040-1122. Automatic Electro-Plating's permit is effective until July 14, 1991.

In January of 1986, AEP was determined to be in violation of Sections 307 and 308 of the Clean Water Act, 33 U.S.C. Subsection 1317, and Subsection 1318. A Civil Action Suit (86-0920) was filed by the United States Environmental Protection Agency, Region II. Gerald Borriello, President of AEP, signed a Consent Decree on April 15, 1987 for settlement of the pending actions. A \$100,000 penalty was paid for the violation by Automatic Electro-Plating.

A prospective acquisition of AEP stock by Gerald F. Mahoney and Sennody Volkov in 1989, initiated the Environmental Cleanup Responsibility Act (ECRA) pursuant to N.J.A.C. 7:26-B-1.6 (stock purchase and redemption agreement of controlling share of assets of an industrial establishment). Subsequently, a General Information Submission and Site Evaluation Submission were filed with the Bureau of Environmental Evaluation Cleanup and Responsibility Assessment (BEECRA) on November 30, 1989 and January 10, 1990 respectively. Both submissions were determined to be incomplete by the Industrial Site Evaluation Element (ISE).

The Earth Technology Corporation, consultant to Automatic Electro-Plating, submitted a ECRA Negative Declaration on April 6, 1990, but it was found to be deficient. A revised declaration submitted on April 18, 1990 was waved due to enforcement actions on the adjacent property. No sampling was originally proposed for the facility. However, Mr. Borriello stated during a site inspection on November 7, 1990, that the Department (presumably ECRA) is requiring him to investigate contamination on site through sampling.

# LOT 6 AND 10, BLOCK 5005

The south-southeast portion of the Foundry Street Complex consists of Lots 6 and 10 (Block 5005). Ashland Chemical Company acquired the property from Lasp Realty, Inc. in June, 1968. The two parcels are referred to as the "West Plant" and lie adjacent to Arkansas Chemical. It should be noted that the Ashland facility is divided in half by the New Jersey Turnpike. The

portion of the facility located on the east side of the turnpike is referred to as the "East Plant", and is not considered part of the Foundry Street Complex.

# ASHLAND CHEMICAL COMPANY.

Ashland Chemical Company, Industrial Chemical and Solvents Division (IC&S), EPA ID #NJD060803905, 221 Foundry Street, has operated on Lots 6 and 10 (Block 5005) since 1968. Ohmlac Paint and Refinishing Company once manufactured roofing felts and coatings on Lot 6. The company ceased operations on the property around 1961. Subsequently, the property was leased by Jo-Mar Trucking through the mid sixties. No other information is known about the operations of Ohmlac and Jo-Mar Trucking.

The IC&S Division received bulk shipments of aliphatic and aromatic hydrocarbons, acids, alcohols, alkines, amines, esters, ethers, glycols, halogenated solvents, ketones, and nitro paraffins by rail car and tank truck. Ashland transfers the product into a series of above ground tank farms throughout their property. The chemicals are repackaged into smaller bulk lots, such as bags, drums, and other containers, for distribution to their customers. No chemicals are manufactured on site, however, a few special blends (solvent mixtures) are processed. Ashland also generates waste oils, spill cleanup material and hose residue on site.

The West Plant contains loading/unloading areas for rail cars and tank trucks, a drumming warehouse (Building #19), and a tank farm (referred to as the 200 Series), see Attachment 3. Ashland's 200 Series tank farm consisted of 17 vertical above ground storage tanks. Product stored inside the tanks included: 140 solvent, cyclohexane, diemethyl formaldehyde, laktane, light oils, mineral spirits, plasticizers, toluene, and xylene (See Storage and Transfer Vessels of Volatile Organic Substances Maintained in File). The tanks were surrounded by a containment wall made of fire brick. It should be noted that the containment wall was reported to be structurally unsound by DWR personnel. The tank farm also contained a storage tank for No. 4 fuel oil.

Widespread contamination has been documented throughout the IC&S facility. The contamination is a by-product of routine site operations (i.e. storage, loading/unloading operations). On March 7, 1979, a spill of No. 4 fuel oil occurred in the 200 Series tank farm, but was contained within the diking. Approximately 18,000 gallons of waste solvents and fuel oil were removed. Subsequently, a ground water recovery system, consisting of three trenches was installed around the 200 Series tank farm.

Inspections conducted by Department personnel on two occasions, March 13 and 28, 1979, noted that the recovery system had been infiltrated with oil and solvents. Apparently, the contaminants were not attributed to the spill, since the dike area contained a water bottom which prevented most of the spill from entering into the ground.

Spillage and/or leakage was also documented throughout Ashland's IC&S facility by representatives of the NJDEP. Areas noted included: All tank farms, loading/unloading manifolds, pipe connections, sumps, and the storm sewer system were noted to contain product. Corrective measures were

discussed with Ashland's officials who stated that it would not be economically feasible for the company to implement all of the remedies required by the Department.

On Hay 20, 1980, DWR personnel collected water samples from two recovery sumps on site. High levels of benzene, toluene, trichloroethylene, ethyl benzene, m-xylene, p-xylene, and o-xylene were detected in the sample collected from the west sump, located adjacent to building #19. Similar volatile organic compounds were present in the east sump sample.

Ashland proposed a ten year construction achedule to upgrade the facility's Discharge, Prevention, Containment, Countermeasure Plan (DPCC). However, this plan was found unacceptable. A modified plan to be implemented over a five year period was subsequently proposed, but excluded the construction of impervious diking and the replacement of old tanks. By April of 1984, a number of corrective measures outlined in the DPCC plan had been implemented. However, spillage still existed on site in many of the areas not yet addressed.

Ashland's DPCC plan went through numerous revisions but a final plan had not been approved by the Department. In November of 1984, Ashland suggested the construction of a new facility. Consequently, this approach was initiated and triggered ECRA.

Ashland's consultant, M.T. Gates, Inc. conducted a preliminary site assessment on December 1 and 21, 1987. During the December 21 site visit, soil samples and surface water samples were collected from the ICSS West Plant. These samples contained halogenated and aromatic volatile organic compounds, ketones and petroleum distillates.

M.T. Gates initial ECRA Sampling Plan for the IC&S facility was found to be insdequate by the BEERA. A revised Sampling Plan was approved on November 18, 1988. Ten monitoring wells were installed throughout the west plant and sampling occurred on Harch 7, 1989. In addition to the ground water samples, eight soil borings were taken at depths ranging from 1.5 - 3.0 feet. Both ground water and soil samples contained halogenated VOCs, aromatic VOCs, ketones, metals, and petroleum distillates. The greatest percentage of the contaminants detected were in the aromatic VOC fraction.

A Hydrogeologic Environmental Assessment Conceptual Remedial Plan was submitted by H.T. Gates, Inc. in 1990. The plan called for a ground water interceptor trench to be installed six feet below the existing grade, on the north, east, and south perimeter of the IC&S facility. The interceptor trench would be connected to a series of collection sumps that would accumulate contaminated ground water. The contaminated ground water would then be pumped through a treatment system and discharged into either the PVSC or surface waters. Recently, a Supplemental Sampling Plan has been submitted for the pump and treatment system proposed by H.T. Gates. Upon approval of the Sampling Plan, Ashland will obtain the necessary permits for the systems. The treatment system is expected to be operational by the Spring of 1991.

#### LOT 4, BLOCK 5005

Kem Realty Company merged with D.S.C. of Newark, NJ Raw Materials Inc., Newark Glassine Bag Company, Norpak Corporation, Diamond Ink Company, A.A.C. Realty Company and Core Realty Corporation forming Torco Investing Corporation on April 30, 1976. Torco Investing Corporation conveyed Lot 4 (Block 5005) to Norpak Corporation on November 30, 1976. Subsequently, Norpak merged with Norpak Specialties Corporation, Leeds Enterprises, Inc., and Abar International Corporation forming a new corporation named A.A.C. Transitional Investment Corporation. On November 30, 1981, A.A.C. sold Lot 4 to Norpak Corporation.

While under the ownership of Kem Realty Company, Norpak Corporation, Torco Investing Corporation, and A.A.C. Transition Investment Corporation, buildings and space on the property were leased to a number of tenants which include: ABC Demolition Company (Building #15), Avon Drum Company (north side of property), Berg Chemical (Buildings #5 and #5A), CWC Industries, Inc. (Buildings #17 and #18, and #36), Comstock Foods (Buildings #38), Conus Chemical (Buildings #4 and #7), Coronet Chemical Company (Building #9), County Lift Truck Service (Building #14), Essex Chemical (Building #17), Grignard Chemical (Building #7), Honig Chemical (Building #7 and #13), Hummel Chemical (Building Unknown), Horrel Truck Service (Building #9), and RFE Industries (Building #1).

NOTE: See Attachment 2 for Building Locations.

#### C.W.C. Industries, Inc.

C.W.C. Industries, Inc. leased space in buildings #17, #18 and #36. The company manufacturers hot stamping foils (plastic ribbons). The operation involves the application of solvent based surface coatings to a polyester substrate (film). Upon completion of this process, the coated films are dried in an oven. Raw materials used in the coating formulations include isopropanol, methyl ethyl ketone, methanol, v, m & p napthalene, plasticizers, and toluene. These materials were stored outside in a yard adjacent to building #17 and #18. C.W.C. claims that it does not generate any waste on site. Any left over materials are recycled because disposal is too expensive.

The company possesses a NJDEP Air Permit #063295 which they received in May of 1983. C.W.C.'s surface coating is categorized as a paper coating operation in accordance with Table 3B of N.J.A.C. 7:27-16.5. Volatile organic substances (VOS) cannot exceed 2.9 pounds per gallon of coating, applied per hour, in the paper coating category. Two surface coating samples taken on November 10, 1988 exceeded VOS standards. Analysis of the coatings revealed that the coatings contained 5.33 and 6.53 pounds of VOS per gallon. Subsequently, an Administrative Order and Notice of Civil Administrative Penalty Assessment (AO/NCAPA) in the amount of \$500 was issued to C.W.C. Industries. The penalty was paid and the company began to come into compliance by ordering new air pollution control apparatus. No other Department actions are known to have occurred at the facility. C.W.C. has since purchased the former Hummel Lanolin facility.

#### Conus Chemical

Conus Chemical Company, Inc. (aka Berg Chemical), a New York Corporation, conducted a chemical repackaging/distribution business in buildings #4, #5 and #7 which are situated on the western portion of Lot 4. In September of 1984, Conus purchased the assets of Berg Chemical Company which included accounts, equipment and chemical inventory. Berg Chemical had operated a similar business in the Bronx, New York. The New York City Department of Environmental Protection performed a publicly funded cleanup at the Bronx site in July, 1984. Various chemicals were found improperly stored at the facility.

Norpak Corporation and Conus were both issued Directives by the Division of Hazardous Waste Management on April 16, 1987. The Directive indicated that hazardous substances were improperly stored in building #7. Some of these drums had discharged their contents. Both companies were directed to repack leaking containers, segregate materials on site by hazard class and compatibility, and engage a qualified contractor to submit a cleanup plan. No actions were taken to correct the noted problems.

Numerous incidents have occurred at Conus Chemical Company which have required responses by the Newark Office of Emergency Management and NJDEP, Bureau of Emergency Response. In June of 1987, a drum of benzyl chloride was emitting hydrogen chloride vapor through a pinhole leak. The drum had been previously owned by Berg Chemical. The BER used Spill Fund monies to hire a contractor who neutralized and contained the fuming drum. Efforts made by the Department to contact Conus personnel were unsuccessful.

Conus Chemical was evicted from Norpak's property on December 31, 1989. An inspection conducted by the DHWM, Bureau of Metro Enforcement noted discharges of hazardous substances throughout the inside and outside of the facility. Conus and Norpak were subsequently cited for violations under the Spill Act. On January 31, 1990 a fire occurred in an outside debris pile near building #8. The USEPA inspected the Conus facility and found approximately 1,000 drums and containers with acids, flammables, laboratory reagents, oxidizers, petroleum products and solvents improperly stored.

On February 9, 1990 the NJDEP officially referred the site to the USEPA for a CERCLA Removal Action. Consequently, Norpak Corporation granted EPA access to the site for a cleanup. Remedial activities commenced on February 19, 1990. The objective of the project was to remove any threat of fire and explosion, and eliminate the threat of direct contact with hazardous substances abandoned on site. The cleanup was completed by March 30, 1990. Further remedial activities at the site are now pending. Berg Chemical Cc. Inc. and Conus Chemical are investigating site contamination through ECRA.

#### Coronet Chemical Company, Inc.

Coronet Chemical Company, Inc., EPA ID #NJD046954715, manufactured metallic sodium dispersions and pigment concentrations used in the teflon industry. In addition, the company was developing a sodium dispersion to destroy PCBs. The company occupied building #9 located to the east of Conus

Chemical. Coronet Chemical stored some of their raw materials in building #4 which they subleased from Conus.

Coronet was originally registered as a hazardous waste generator and TSD facility on their initial RCRA Part A application submitted in August, Coronet reclaimed napthalene and ether from spent teflon etching solution through settling and distillation processes. First, the solution was vacuumed into a distillation columnar and transferred into a holding tank as diethyleneglycoldimethylether. Once the settling process was completed, the ether went into a drying column containing activated aluminum and subsequently into a drum for resale. Still bottoms produced from the process, consisting of naphthalene (solid), were placed in five gallon pails and heated in a cooker. The clean naphthalene recovered from this process was used to make sodium dispersions. Waste generated by Coronet's operations included spill cleanup material (approximately one drum per year); solids from the distillation column (1/2 pound per year); and spent activated alumina. Non contact cooling water was discharged into the Passaic Valley Sewerage Authority.

This reclamation service was originally used by Atlantic Tubing, Paterson, NJ and Chem Plast, Wayne, NJ. However only Chem Plast was utilizing the services of Coronet in 1982. Due to the lack of business, TSD status was never developed.

RCRA inspections conducted by the Department in 1981 and 1982 noted numerous deficiencies at the facility. During one such inspection, a leaking drum of napthalene was observed and waste materials had exceeded the 90 day storage limit for hazardous waste. Moreover, waste generated from the recovery process was disposed into a domestic dumpster on site. Other deficiencies reported as a result of the RCRA inspections included: No waste analyses, no closure plan, no operation records, no personnel training, and no manifests.

Coronet vacated the premises around 1986. The company abandoned drums containing flammable, reactive and explosive materials on site. In March of 1987, a drum containing metallic sodium caught fire and exploded.

#### Grignard Chemical Company, Inc.

Grignard Chemical Company, Inc., EPA 1D #NJD002201093, occupied building #7 located on the west side of Lot 4. The company conducted operations at this location between 1975 and 1984 which included the manufacturing of chemical preparations such as metal preservatives and cleaners.

On August 18, 1980 Grignard Chemical filed a Notice of Hazardous Waste Activity and subsequently a RCRA Part A application on November 19, 1980. The company's president, Emil G. Grignard, requested to delist the TSD facility to generator only status on September 21, 1981. The request was approved on March 3, 1983, after the Department had issued a Notice of Violation (NOV) in November 1982. The NOV cited Grignard Chemical for failure to submit an annual report required of TSD facilities. No other enforcement actions are known to have been taken against Grignard.

Waste generated by Grignard Chemical are generally unknown. However, in a letter to the USEPA, Grignard stated that they use chlorinated hydrocarbons. Also a Department memo dated February 1, 1982 indicated that Grignard received a shipment of transformer oil containing 135 ppm polychlorinated biphenyls (PCBs). According to the Industrial Waste Survey, Grignard generated one 30 gallon drum of solid waste every three weeks.

# DISCHARGE/ABANDONMENT INFORMATION:

Foundry Street Complex
141-189 Foundry Street and 96-144 Rosnoke Avenue
City of Newsrk, Essex County
Block 3005, Lots 4, 5, 6, 10, 21 & 22

Gurrent Owners: Block 5005, Lot 4 (96-126 Roanoke Avenue) Norpak Corporation 76 Blanchard Street Newark, NJ 07105

Block 5005, Lot S (171-183 Foundry Street) City of Newark 920 Broad Street Newark, NJ 07102 (201) 733-3844

Block 5005, Lots 6 & 10 (185-189 Foundry Street)

Ashland Dil & Refining Company
PO Box 1400

Lexington, Kentucky 40512

Block 5005, Lot 21 (128-144 Roanoke Avenue) C.W.C. Realty Company, Inc. 185 Foundry Street, Building #18 Newark, NJ 07105

Block 5005, Lot 22 (157-169 Foundry Street) Foundry Street Corporation 185 Foundry Street Newark, NJ 07105 A composite soil sample was obtained from beneath a floor drain in the process building located near the area where the sludge material was discovered outside. The sample was taken at a depth of 20.5 - 26.3 inches and 26.1 - 32.5 inches. The sample contained VOCs, B/Ns, and metals below ECRA action level. The floor drains were determined not to be a source of the sludge through the concentrations detected in the soil sample.

In October, 1988, Dames & Moore collected a sediment sample (WC-1) and water sample (WC-2) from the drainage basin situated on the north side of the process building. The sediment sample contained methylene chloride (11,000 ppb), toluene (6,100 ppb), five B/Ns below method detection limits, and metals (i.e. cadmium, copper at 1,096 ppm, lead at 1,044 ppm, selenium, zinc at 3,746 ppm). The water sample contained low levels of cadmium and lead. However, both samples had elevated levels of total petroleum hydrocarbons.

#### LOT 22 (BLOCK 5005)

A preliminary ECRA investigation was performed at the Sun Chemical facility by Recon Systems, Inc. on October 14, 1986. Three (3) samples consisting of one soil sample from an unpaved area adjacent to a solid waste dumpster, one sediment sample from a drain located in the drive way south and adjacent to Sun, and one swipe sample of a oily substance on a boiler room floor were taken during the sampling episode.

The soil and sediment samples exceeded the Bureau of Industrial Site Evaluation cleanup levels for base neutral compounds and petroleum hydrocarbons. Base neutral compounds detected included napthalene, 2-methylnapthalene, di-n-butyl phthalate, bis (2-ethylnayl) phthalate and unknown brominated compounds. Hetals (i.e. antimony, arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc) were also present in both samples. PCBs were detected in the soil and swipe samples.

In August, 1989, three monitoring wells were installed at Sun Chemical to examine ground water quality. Two of the three wells (MW-1, MW-3) were placed on the west and north side of the facility respectively. While MW-2 was placed to the south of the facility. Ground water was determined to flow in a southeast direction and was reported to be influenced by tidal action.

Ground water samples were collected from the monitoring wells on September 19 and November 10, 1989. The samples from all three wells exceeded ECRA action levels for total B/Ns and VOCs. However, levels detected in MW-2 were lower than those levels detected in the other two monitoring wells (MW-1, MW-3). Impeddition MW-3 also exceeded action levels for PRCs; PCBs, and metals (i.e. arsenic, cadmium, lead, mercury, zinc).

Recon Systems, Inc. collected four (4) sediment samples and one water sample from Sun's sewer system on July 17, 1990. Sediment sample #1 was collected from the drainage system (strip drain) located in the driveway separating Sun and Arkansas Chemical where a second drain from Arkansas property connects into the first drain. The sample contained elevated levels for volatile organic compounds (VOC), base neutral compounds (B/N), organic acids, cyanide, phenol and priority pollutant metals (i.e. lead, mercury).

Sediment sample \$2 was collected from a catch basin located in the driveway separating Sun and Automatic Electro-Plating to the west. The catch basin is situated where an underground sewer line from Automatic Electro-Plating connects into the sewer system. This sample contained elevated levels of VOCs, unknown semi volatile compounds, cyanide (45 ppm) and priority pollutant metals (i.e. cadmium, chromium, copper, lead, nickel (4,270 ppm), zinc (4,140 ppm).

Sediment sample #3 was obtained from the underground sewer system where a strip drain located in the driveway on the north side of Automatic Electro-Plating connects with the underground sewer line. The samples contained PCBs (100 ppm), VOCs, B/N, organic acids, unknown semi volatiles, cyanide, phenol and priority pollutant metals (i.e. antimony, arsenic, cadmium, chromium, copper, lead, mercury, nickel, zinc). Overall, sediment sample #3 had the highest concentration of metals detected in all of the samples analyzed.

Monitoring wells MW-1 and MW-3 contained high levels of contamination. It was suspected that the contamination detected in the wells may be coming from an off site source. Recon Systems, Inc., consultants for Sun Chemical, installed five additional MWs in June and August, 1990. Two of the wells (MW-4, MW-5) were installed along the northern property line. MW-6 was installed along the western property line adjacent to Automatic Electro Plating. MW-7 was installed on the south side of the facility. Ground water was determined to flow onto Sun Chemical from the south. Sampling of the wells occurred on August 23, 1990. Ground water samples contained VOCs, B/N, and priority pollutant metals.

# LOTS 4, 5, 21, 22 (BLOCK 5005)

Bureau of Planning and Assessment (BPA) personnel conducted a presampling site inspection (SI) at the Foundry Street Complex on October 7, 1988. Air monitoring and soil gas readings were limited to Lots 4, 5, 21 and 22. Soil gas readings ranged in concentrations from 0.6 ppm - 600 ppm (as benzene) and 10 ppm - 1,000 ppm (as methane) with the HNU and OVA respectively. Ambient air levels ranged from 1-10 ppm.

Information obtained from the SI indicated that further investigation was warranted. Eighteen soil samples, five sediment samples, four surface water samples, and two ground water samples were collected during the sampling episode on October 14, 1988 (See Attachment 2 for Sampling Locations). High concentrations of volatile organic compounds, base neutral compounds, PCBs, and metals were present in the soil, sediment, surface water and ground o water samples, The most commonly detected contaminants included: Trichloroethane, benzene, chlorobenzene, toluene, xylene, naphthalene, tetrachlorobenzene, di-n-butyl pyrene, phthalate, (2-ethylhexyl) phthalate, butyl benzyl phthalate, aroclor 1248, arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc.

# LOTS 6 & 10 (BLOCK 5005)

Ashland Chemicals ECRA consultant, T.M. Gates Inc. collected two surface water and three soil samples from Lot 10 in December of 1987. The samples were taken during a preliminary site assessment. Both surface water samples

contained 1,1,1-trichloroethane. The soil samples revealed several additional volatile organic compounds that included: 1,1-dichloroethane, 1,1-dichloroethene, xylene, 4-methyl-2-pentanone, and mineral spirits.

Based on the preliminary data, ten monitoring wells (MW) and eight soil borings (SB) were constructed on Lots 6 and 10. Three of the monitoring wells (MW-1, MW-2 and MW-3) were installed along the northern boundary of Lot 6, which is adjacent to Arkansas Chemical. These wells were intended to provide upgradient ground water quality data. Ground water samples from the three monitoring wells contained a variable pH, elevated concentrations of metals (i.e. arsenic, cadmium, chromium, copper, leads, nickel and zinc), and volatile organic compounds. MW-3 had the highest concentrations of metals.

The greatest occurrence of ground water contamination was detected in the central portion of Lots 6 and 10 in MW-5 and MW-6. Both wells were located in the vicinity of the 200 Series tank farm which has a history of spills and ground water contamination. Monitoring wells (i.e. MW-7, MW-8, MW-9 and MW-10) located hydraulically downgradient of the other wells contained low levels of volatile organic compounds. A general breakdown of the chemical groups detected in the ground water samples were halogenated VOCs (3%), aromatic VOCs (93%), ketones (4%), and petroleum distillates (trace).

Foundry Street Complex – Avon Drum – CWC – Arkansas Chemical Company – Automatic Electroplating, etc.

# FOUNDRY STREET COMPLEX ARA ARKANSAS CHEMICAL AND HUMMEL CHEMICAL

# BUMHARY

The Foundry Street Complex consists of six separate parcels of land, Lots 4 (Block 5005); Lot 5 (Block 5005); Lot 6 (Block 5005); Lot 10 (Block 5005); Lot 21 (Block 5005); and Lot 22 (Block 5005), see Attachment 1. The site is located in the Iron Bound Section of Newark and is situated between Foundry Street on the east, the former Manufactures Railroad on the west, and Roanoke Avenue on the north. Bordering the southern portion of the site is the New Jersey Turnpike.

Approximately 30 small buildings are situated throughout the complex. The buildings are separated by narrow driveways which have strip-like drains in the middle of the lane. These drains are connected to an industrial sever line on Roanoke Avenue and receive surface water run-off and industrial discharge from companies in the complex. The complex is easily accessible from numerous locations.

Historically, the Foundry Street Complex has been occupied by a variety of chemical manufacturing industries. One of the first known companies associated with the site was Central Dyestuff and Chemical Company (CDC), a New Jersey Corporation. CDC acquired the property in three different portions from Waldron Brothers Realty Company, Municipal Investment Company, and part of the premises known as Plum Point Lane duly vacated by the City of Newark. CDC manufactured color specialties which included oranges, fast reds, scarlets, browns, chrysoidine blacks, oil soluble colors, and a large variety of colors and dyes used for cakes, varnishes, inks, stains, straw, leather, etc.

On August 13, 1930, Central Dyestuff and Chemical Company merged with Consolidated Color and Chemical Company (CCC). The latter name was retained by the new corporation which continued to operate on site.

In January of 1936, Arkansas Company, Inc., a New York Corporation, executed a three year lease for space in buildings designated as \$16, \$24, \$26, \$27, \$28, \$32 and \$35 with CCC. Consolidated Color and Chemical gave Arkansas the sole right and option to purchase the demised property. However, this option expired on October 31, 1938. After executing the lease with Arkansas, CCC changed their name to H.A. Hetz & Company Inc., a New Jersey Corporation, on March 2, 1936. H.A. Hetz & Company name was changed to Roanoke, Inc., a New Jersey Corporation, on May 24, 1937.

In January, 1939, Rosnoke, Inc. sold the property which now consists of Lots 4, 5, 21 and 22 to Chemical Industries, Inc. for a sum of \$10.00.

Prior to the sale of the premises, a ten year lease which became affective February 1, 1939, was negotiated between Arkansas Company, Inc., Chemical Industries, Inc. and Roanoke Inc. Arkansas Company's new lease still contained the right and option to purchase the premises which expired on November 1, 1943. Apparently, Arkansas and Chemical Industries, Inc. had negotiated the sale of the property before the November 1 deadline. The

In producing violet pigment, polyphosphoric acid and dianilino-terephthalic acid are mixed together and heated, to dehydrate the dianilino-terephthalic acid. The remaining material is added to methyl alcohol and refluxed for several hours. Water is added and the mixture is distilled to recover some of the alcohol. The alcohol is later reused.

The mixture is pumped to a filter press where the pigment is collected. Effluent generated from the process, consisting of alcohol and phosphoric acid, is pumped to a neutralization tank for treatment with caustic soda. After the pH is adjusted, the effluent is discharged into PVSC. Hagenta pigments are made the same way except 2,5-di-p-toluidino-terephthalic acid or 2,5-di-(p-chloroanilino) telepathic acid is used as the starting material.

Originally, Sun Chemical was identified as a hazardous waste generator and TSD facility on their RCRA Part A application. TSD activities included storage in tanks (SO2) and treatment in tanks (TO1). In April of 1988, the Bureau of Hazardous Waste Engineering (BHWE) delisted the company's status to a generator only since waste were no longer stored on site for more than 90 days.

Sun is classified as a Industrial Waste Management Facility (IWMF) under the New Jersey Water Pollution Control Act, due to the on site neutralization of waste. Caustic soda is used to neutralize process effluent in two interconnected 1,500 gallon above ground storage tanks situated between Buildings #23 and #31. The treated effluent is discharged into a sump connected to an industrial sever located on the adjacent property (Lot 4) owned by Norpak Corporation. Sun discharged its effluent into the strip drainage system located on the west side of the plant before the installation of the waste water treatment unit.

The Passaic Valley Sewerage Commission (PVSC) regulates the discharge under Permit \$2040-1042 and requires the pH to be between 5.0 and 10.5. Sun is exempt from obtaining a NJPDES permit because it is considered an elementary neutralization unit. The facility qualifies as an elementary unit since the wastes neutralized are only considered hazardous due to the corrosivity characteristic.

Some of the company's hazardous waste is transported off site to Industrial Solvents in Pennsylvania. Industrial Solvents reclaims the solvent portion of the phosphoric acid and methanol/isopropanol mixture. This is sold back to Sun Chemical.

Sun Chemical Corporation entered an agreement for the sale of the Foundry Street facility with Sun/DIC Acquisition Corporation. In October, 1986, Recon Systems Inc. conducted sampling at the facility as part of a preliminary acquisition survey. Samples consisting of one soil, one sediment, and one swipe sample taken of an oily stain on the boiler room floor. The sediment and soil samples contained VOCs, PHCs, PCBs and priority pollutant metals. PCBs were detected in the swipe namples.

Consequently, both parties signed an ECRA Administrative Consent Order (ACO) on December 30, 1986. The ACO required Sun to install monitoring wells so that ground water quality could be investigated. Recon Systems Inc. collected ground water samples from three monitoring wells throughout the

#### LOT 4, BLOCK 5005

Kem Realty Company merged with D.S.C. of Newark, NJ Raw Materials Inc., Newark Glassine Bag Company, Norpak Corporation, Diamond Ink Company, A.A.C. Realty Company and Core Realty Corporation forming Torco Investing Corporation on April 30, 1976. Torco Investing Corporation conveyed Lot 4 (Block 5005) to Norpak Corporation on November 30, 1976. Subsequently, Norpak merged with Norpak Specialties Corporation, Leeds Enterprises, Inc., and Abar International Corporation forming a new corporation named A.A.C. Transitional Investment Corporation. On November 30, 1981, A.A.C. sold Lot 4 to Norpak Corporation.

While under the ownership of Kem Realty Company, Norpak Corporation, Torco Investing Corporation, and A.A.C. Transition Investment Corporation, buildings and space on the property were leased to a number of tenants which include: ABC Demolition Company (Building #15), Avon Drum Company (north side of property), Berg Chemical (Buildings #5 and #5A), CWC Industries, Inc. (Buildings #17 and #18, and #36), Comstock Foods (Buildings #38), Conus Ghemical (Buildings #4 and #7), Coronet Chemical Company (Building #9), County Lift Truck Service (Building #14), Essex Chemical (Building #17), Grignard Chemical (Building #7), Honig Chemical (Building #7 and #13), Hummel Chemical (Building Unknown), Morrel Truck Service (Building #9), and RFE Industries (Building #1).

NOTE: See Attachment 2 for Building Locations.

#### C.W.C. Industries, Inc.

C.W.C. Industries, Inc. leased space in buildings #17, #18 and #36. The company manufacturers hot stamping foils (plastic ribbons). The operation involves the application of solvent based surface coatings to a polyester substrate (film). Upon completion of this process, the coated films are dried in an oven. Raw materials used in the coating formulations include isopropanol, methyl ethyl ketone, methanol, v, m & p napthalene, plasticizers, and toluene. These materials were stored outside in a yard adjacent to building #17 and #18. C.W.C. claims that it does not generate any waste on site. Any left over materials are recycled because disposal is too expensive.

The company possesses a NJDEP Air Permit \$063295 which they received in May of 1983. C.W.C.'s surface coating is categorized as a paper coating operation in accordance with Table 3B of N.J.A.C. 7:27-16.5. Volatile organic substances (VOS) cannot exceed 2.9 pounds per gallon of coating, applied per hour, in the paper coating category. Two surface coating samples taken on November 10, 1988 exceeded VOS standards. Analysis of the coatings revealed that the coatings contained 5.33 and 6.53 pounds of VOS per gallon. Subsequently, an Administrative Order and Notice of Civil Administrative Penalty Assessment (AO/NCAPA) in the amount of \$500 was issued to C.W.C. Industries. The penalty was paid and the company began to come into compliance by ordering new air pollution control apparatus. No other Department actions are known to have occurred at the facility. C.W.C. has since purchased the former Hummel Lanolin facility.

FOUNDRY STREET CON XX PAGE 14

Waste generated by Grignard Chemical are generally unknown. However, in a letter to the USEPA, Grignard stated that they use chlorinated hydrocarbons. Also a Department memo dated February 1, 1982 indicated that Grignard received a shipment of transformer oil containing 135 ppm polychlorinated biphenyls (PCBs). According to the Industrial Waste Survey, Grignard generated one 30 gallon drum of solid waste every three weeks.

# SUBSTANCES DISCHARGED/ABANDONED:

The following contaminants were detected in sediment samples, soil samples, and surface water samples collected throughout the foundry Street Complex by the Bureau of Planning and Assessment on October 14, 1988.

VOCs: Acetone, Benzene, 2-Butanone, Carbon Disulfide, Chlorobenzene,

Chloroform, 1,1-Dichlorosthane, 1,2-Dichlorosthane, 1,2-Dichlorosthane, Chloride, 4-Methyl-2-Pentanone, Tetrachlorosthene, Toluene,

1,1,1-Trichloroethene, Vinyl Chloride

BNAs: Anthracene, Benzoic Acid, Benzo(a)Anthracene, Benzo(b)

Fluoranthene, Benzo(k)Fluoranthene, Benzo (g,h,i) Perylene, Benzo(a)Pyrene, (2-Ethylhexyl) bis Phthalate. Butylbenzylphthalate, 4-Chloroaniline, 1,2 Dichlorobenzene, 1,3 Dichlorobenzene, 1,4 Dichlorobenzene, Dibenzo(a,h)Anthracene, Di-n-Octylphthalate, 2,4-Dichlorophenol. Di-n-Butylphthalate, Fluorene, Indeno (1,2,3,-c,d)Fluoranthene. 2-Methylnaphalane, Naphalene. 2-Nitroaniline, Phenanthrene.

Phenol, Pyrene, 1,2,4-Trichlorobenzene, 2,4,6-Trichlorophenol

#### PESTICIDES:

Aldrin, Dieldrin, 4,4'DDT, Arcolor 1248

METALS: Antimony, Arsenic, Barium, Cadmium, Chromium, Copper, Lead,

Mercury, Nickel, Silver, Vanadium, Zinc, Cyanide

A composite soil sample was obtained from beneath a floor drain in the process building located near the area where the sludge material was discovered outside. The sample was taken at a depth of 20.5 - 26.3 inches and 26.1 - 32.5 inches. The sample contained VOCs, B/Ns, and metals below ECRA action level. The floor drains were determined not to be a source of the sludge through the concentrations detected in the soil sample.

In October, 1988, Dames & Moore collected a sediment sample (WC-1) and water sample (WC-2) from the drainage basin situated on the north side of the process building. The sediment sample contained methylene chloride (11,000 ppb), toluene (6,100 ppb), five B/Ns below method detection limits, and metals (i.e. cadmium, copper at 1,096 ppm, lead at 1,044 ppm, selenium, zinc at 3,746 ppm). The water sample contained low levels of cadmium and lead. However, both samples had alevated levels of total petroleum hydrocarbons.

# LOT 22 (BLOCK 5005)

A preliminary ECRA investigation was performed at the Sun Chemical facility by Recon Systems, Inc. on October 14, 1986. Three (3) samples consisting of one soil sample from an unpaved area adjacent to a solid waste dumpster, one sediment sample from a drain located in the drive way south and adjacent to Sun, and one swipe sample of a oily substance on a boiler room floor were taken during the sampling episode.

The soil and sediment samples exceeded the Bureau of Industrial Site Evaluation cleanup levels for base neutral compounds and petroleum hydrocarbons. Base neutral compounds detected included napthalene, 2-methylnapthalene, di-n-butyl phthalate, bis (2-ethylbexyl) phthalate and unknown brominated compounds. Hetals (i.e. antimony, arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc) were also present in both samples. PCBs-were detected in the soil and swipe sample.

In August, 1989, three monitoring wells were installed at Sun Chemical to examine ground water quality. Two of the three wells (MW-1, MW-3) were placed on the west and north side of the facility respectively. While MW-2 was placed to the south of the facility. Ground water was determined to flow in a southeast direction and was reported to be influenced by tidal action.

Ground water samples were collected from the monitoring wells on September 19 and November 10, 1989. The samples from all three wells exceeded ECRA action levels for total B/Ns and VOCs. However, levels detected in MW-2 were lower than those levels detected in the other two monitoring wells (MW-1, MW-3). In-addition-MW-3 also exceeded action levels for PHCs, PCBs, and metals (i.e. arsenic, cadmium, lead, mercury, zinc).

Recon Systems, Inc. collected four (4) sediment samples and one water sample from Sun's sewer system on July 17, 1990. Sediment sample #1 was collected from the drainage system (strip drain) located in the driveway separating Sun and Arkansas Chemical where a second drain from Arkansas property connects into the first drain. The sample contained elevated levels for volatile organic compounds (VOC), base neutral compounds (B/N), organic acids, cyanide, phenol and priority pollutant metals (i.e. lead, mercury).

rSediment sample \$2 was collected from a catch basin located in the driveway separating Sun and Automatic Electro-Plating to the west. The catch basin is situated where an underground sewer line from Automatic Electro-Plating connects into the sewer system. This sample contained elevated levels of VOCs, unknown semi volatile compounds, cyanide (45 ppm) and priority pollutant metals (i.e. cadmium, chromium, copper, lead, nickel (4,270 ppm), winc (4,140 ppm).

Sediment sample #3 was obtained from the underground sewer system where a strip drain located in the driveway on the north side of Automatic Electro-Plating connects with the underground sever line. The sample of soft and PCBs (100 ppm), VOCs, B/N, organic acids, unknown semi volatiles, cyanide, phenol and priority pollutant metals (i.e. antimony, arsenic, cadmium, chromium, copper, lead, mercury, nickel, zinc). Overall, sediment sample #3 had the highest concentration of metals detected in all of the samples analyzed.

Monitoring wells MW-1 and MW-3 contained high levels of contamination. It was suspected that the contamination detected in the wells may be coming from an off site source. Recon Systems, Inc., consultants for Sun Chemical, installed five additional MWs in June and August, 1990. Two of the wells (MW-4, MW-5) were installed along the northern property line. MW-6 was installed along the western property line adjacent to Automatic Electro Plating. MW-7 was installed on the south side of the facility. Ground water was determined to flow onto Sun Chemical from the south. Sampling of the wells occurred on August 23, 1990. Ground water samples contained VOCs, B/N, and priority pollutant metals.

# LOTS 4, 5, 21, 22 (BLOCK 5005)

Bureau of Planning and Assessment (BPA) personnel conducted a presampling site inspection (SI) at the Foundry Street Complex on October 7, 1988. Air monitoring and soil gas readings were limited to Lots 4, 5, 21 and 22. Soil gas readings ranged in concentrations from 0.6 ppm - 600 ppm (as benzene) and 10 ppm - 1,000 ppm (as methane) with the HNU and OVA respectively. Ambient air levels ranged from 1-10 ppm.

Information obtained from the SI indicated that further investigation was warranted. Eighteen soil samples, five sediment samples, four surface water samples, and two ground water samples were collected during the sampling episode on October 14, 1988 (See Attachment 2 for Sampling Locations). High concentrations of volatile organic compounds, base neutral compounds. PCBs. and metals were present in the soil, sediment, surface water and ground water samples. The most commonly detected contaminants included: Trichloroethane, benzene, chlorobenzene, toluene, tetrachlorobenzene, naphthalene, pyrene, di-n-butyl phthalate, (2-ethylhexyl) phthalate, butyl benzyl phthalate, aroclor 1248, arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc.

# LOTS 6 & 10 (BLOCK 5005)

Ashland Chemicals ECRA consultant, T.M. Gates Inc. collected two surface water and three soil samples from Lot 10 in December of 1987. The samples were taken during a preliminary site assessment. Both surface water samples

concentrations have been detected in the area of the former 200 Series tank farm. It should be noted that most of the West Plant is not paved.

Arkansas Chemical Company occupied the adjoining property to the south of Sun for approximately 47 years. It should be noted that Arkansas vacated the premises in 1984. The two companies are separated by a narrow driveway. Numerous storage tanks were maintained in the rear south-southwest corner of the property (Lot 5), adjacent to building #28. Arkansas used these tanks to store fuel oil, sulfuric acid, caustic soda, mineral oil, napths and other products. In 1981, a NJDEP, Division of Hazard Management representative noted weep holes in a caustic tank. Spillage stained the ground below the tank and other tanks in the area.

In October, 1988, two soil samples were taken from the southwest corner of the facility behind the former tank house. Both samples were obtained from the same boring. The shallow sample (S-2) contained high concentrations of (i.e. tetrachloroethylene, xylene, toluene, chlorobenzene, ethylbenzene) and semi volatiles (i.e. napthalene, 2-methylnapthalene). Only tetrachloroethylene was present in the deep sample (S-3). suggests that the contamination is the result of surface spillage which has not deeply penetrated into the ground. Spillage from petroleum products was observed on the ground in the rear (west side) of the property during an inspection in 1984. In addition naptha was stored in a tank near the sample Napthalene and 2-methylnapthalene were detected in the shallow soil sample. Spillage or leakage from the tank could have migrated from the tank to this area.

It should be noted that the drainage system throughout the Foundry Street Complex is a major source of contamination. Sediment and surface waters samples collected from the drainage system in October, 1988, contained high concentrations of VOCs, B/Ns, PHCs, PGBs and priority pollutant metals. The drainage system essentially consists of troughs embedded in the driveways which are connected to severlines. A site inspection conducted at the Foundry Street Complex on November 7, 1990, revealed that many sections of the drains had collapsed or were broken. Water observed in the drains had a petroleum sheen on its surface and a heavy residue existed on the bottom. It was also reported that the drains would frequently flood during periods of rain. Any contamination in the drains could be redistributed over other areas covered by the flood waters.

The drainage system connects to severlines located on the south side and to the northwest of Sun Chemical. The severline on the south side, transverses underneath the Sun facility. Both severlines are connected to an industrial severline on Norpak's property to the north. The industrial severline is connected to a city sever on Roanoke Avenue. Four sediment samples were collected from the drainage system and severlines surrounding Sun Chemical on July 17, 1990. These samples contained elevated levels of VOCs, B/Ns, organic acids, unknown semi volatiles, and priority pollutant metals.

Recon Systems, Inc. video inspection of the sewerlines on the premises of Sun Chemical revealed numerous cracks and separations between the pipes. Any contamination entering the sewerline could escape through these openings into the surrounding soil.

Drains from Arkansas Chemical were discovered to flow directly from Building #26, #27 and #28 (See Attachment 4). The drains are connected to the drainage system in the driveway on the north side of the facility. Herman G. Wieland, Chief Chemist of Arkansas, stated in a Sewer Connection Application dated October 27, 1980 that the plant's effluent is neutralized in an outside tank and discharged into "city storm sewers via covered ditches". Waste water samples taken from Arkansas Chemical in October, 1981 tontained trace concentrations of arsenic, cadmium, chromium, copper, lead, mercury, nickel, and zinc. Hercury was detected in effluent samples taken in June and July, 1981. These contaminants have been detected in sediment samples taken from the drains throughout the Foundry Street Complex.

Division of Hazard Management personnel noted in 1981, that spillage from the process building (#28) could flow unobstructed into strip drains outside. It was also indicated that drains located in the shipping building (#27) flowed directly off the premises. In December, 1986, NJDEP personnel observed powder and resin on the floors of the process building. In addition, numerous fiber drums and lines on reactor/process vessels were leaking their contents. The roof was also noted to be leaking which could wash spillage into floor drains that flowed into the drainage system. Many of the products removed from Arkansas Chemical by the EPA were base neutral compounds, acids, cyanides, peroxides, flammables, halogenated organics, oxidizers and organics.

Automatic Electro-Plating Corporation (AEP) has operated an electroplating business on the western portion of Lot 22, adjacent to Sun Chemical, since 1972. The drainage system borders the facility on its north, west and south side, and receives point source discharge and surface water run-off from AEP. A sewerline on the east side is connected to a sanitary source at the facility. Elevated levels of VOCs and priority pollutant metals were detected in a sediment sample (Sediment #2) taken from a catch basin where the two sewerlines connect in July, 1990.

A flow diagram submitted by AEP to the Passaic Valley Sewerage Commission in January, 1989 shows process lines from buildings #21 and #22 discharge into the drain on the north side. High concentrations of arsenic, cadmium, chromium, copper, lead, mercury, silver and zinc were detected in a surface water sample (SW-4) taken from this drain on October 14, 1988.

This drain and the noted severline connect to one another at a catch basin situated near the corner of building #21. Elevated levels of VOCs, B/Ns; PCBs; organic acids, unknown semi volatile compounds and priority pollutant metals (i.e. cadmium, chromium, copper, lead, nickel, zinc) were detected in a mediment sample, (Sediment #3) collected from this catch basin in July, 1990; 1990;

In January, 1989 Gerald Borriello, President of AEP, informed the Passaic Valley Severage Commission that his company does not discharge any cadmium, lead, silver or cyanide into the sewage system. Automatic Electro-Plating's ECRA General Information Submission (GIS) states that only nickel and zinc plating are conducted on site. These metals have been detected in sediment samples collected from the drainage system.

Avon Drum Corporation has operated a drum brokerage on the northern portion of Lot 4, adjacent to Roanoke Avenue and west of the former Hummel Lanolin facility for approximately 20 years. Historical aerial photographs (EPI-IRC-6571, 6572, 6573) taken on September 6, 1978, revealed extensive drum storage along Roanoke Avenue where Avon Drum operates. The area appeared to be heavily stained.

High concentrations of VOCs (i.e. xylene, tetrachloroethene, toluene, ethylbenzene), semi volatiles (i.e. phenanthrene, dirn:butyl phthalate) fluoranthene, pyrene, benzo(a)anthracene), PCBs, and priority poblutant metals were detected in soil samples (S-12, S-13, S-14) collected from the facility on October 14, 1988. Two soil samples (S-10, S-11) taken at the perimeter of the facility contained significantly fewer contaminants at lower concentrations. This implies that contamination is directly associated with site operations (i.e. drum storage). Representatives from the Bureau of Compliance and Technical Services observed spillage throughout the facility on November 7, 1990. During this inspection, a solvent odor was encountered. Two operators at the Foundry Street Complex also stated that the company washes drums out on the premises. Consequently any remaining residues in the drums would be allowed to discharge onto the ground. There is no protective barrier (i.e. concrete, asphalt) at the facility.

Berg Chemical . Co. and Conus Chemical conducted a chemical repackaging and distribution operation in buildings #5, #5A and #7 located on the west side of Lot 4 adjacent to the railroad tracks. Products handled at the facility included acids, alcohols, solvents, petroleum products, corrosives, reactives and flammables. A large inventory of these products were stored inside and outside of the buildings. The outside storage area lacked adequate spill prevention structures to prevent spillage from seeping into ground. High levels of chloroform, 1,2-dichloroethene. the trichloroethylene, tetrachloroethylene, 2-methylnapthalene, benzoic acid, phenthane, di-n-butyl phthalate, pyrene and butyl benzyl phthalate were detected in a soil sample (S-9) collected near the drum storage area on October 14, 1988.

An EPA inventory taken from drums located in the outside storage area included trichloroethylene, chloroethylene, naptha distillate, benzyl chloride, toluene and petroleum ether. Some of these substances were detected in the soil sample. In February, 1990 NJDEP, DHVH personnel reported that various spills of hazardous substances existed outside of the facility. It was also noted that soils were stained along the western portion (exterior) of Conus.

NJDEP representatives observed spillage throughout the inside of building #5 during a presampling site inspection in October, 1988. Conus stored a variety of hazardous substances in 55 gallon drums, fiber drums, fiber bags, small containers and above ground storage tanks. Spillage was also observed inside on subsequent inspections. Floor drains in building #5 were determined to curve towards the east side of the facility. This suggests that the drains may be connected to the drainage system location in the driveway outside. Any spillage resulting from repackaging could flow or be washed into the floor drains.

High concentrations of VOC (i.e. methylene chloride, 1,1-dichloroethene, 1,2 dichloroethene, 2-butanone, 1,1-trichloroethene, 2-butanone, 1,1-trichloroethene, xylene, trichloroethylene, benzene, tetrachloroethylene, toluene, chlorobenzene, semi volatile (1.e. 1,2-dichlorobenzene, napthalene, 2-methylnapthalene, phenanthrene, fluorene, flouranthene, pyrene, butylbenzyl phthalate, bis (2-ethylhexyl) phthalate) pesticides, PCBs and priority poliutant metals were detected in a sediment sample collected from the drain situated between Conus (Building #5) and RFE Industries (Building #1) on October 14, 1988.

An inventory of hazardous materials found in building #5 included: Petroleum product residue, naptha sillate, kerosene, mineral spirits, n-butyl lactate, dry cleaning solution to name a few. Other potential sources of contamination detected on the west-northwest side of Lot 4 may have originated from operations conducted by Coronet Chemical Co., Grignard Chemical Co. Inc., Honig Chemical and Processing Co., Hummel Chemical, RFE Industries, Morrel Truck Services, and County Lift Truck Service.

Grignard Chemical Co. manufactured lubricating oils, cutting oils, cleaners and preservatives in building #7. This consisted of blending materials such as petroleum oil, alkaline additives, chlorinated hydrocarbons and diester compounds with non-hazardous components. Grignard's "Site Evaluation Submission" dated August 21, 1990 included a Hazardous Substance/Waste Inventory List (Appendix D). The list notes that Grignard used dichlorobenzene, dichloromethane, 1,1,1-trichloroethane and petroleum distillates. High concentrations of dichlorobenzene, 1,1,1-trichloroethane, and B/Ns were detected in sediment sample (SED-5) collected from the drain outside building #5 on October 14, 1988. Petroleum distillates with high molecular weights will be present in the base neutral fraction. Such compounds might be related to B/Ns contamination detected in the ditch.

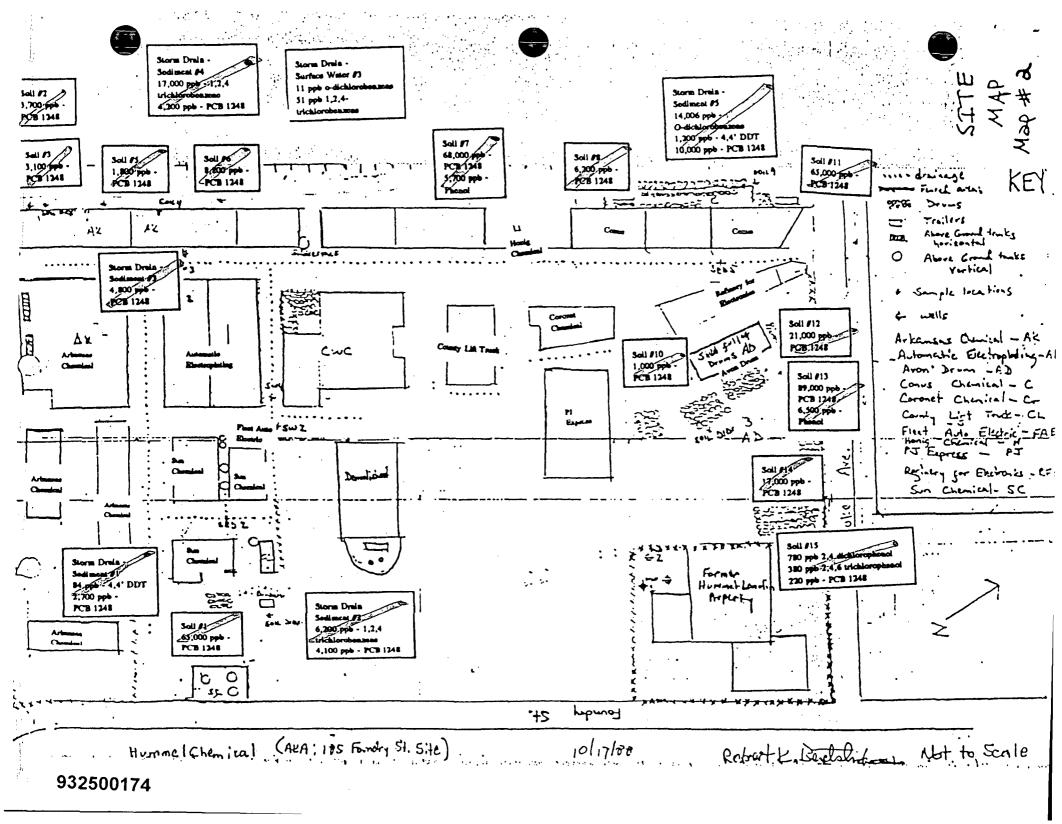
The company has not manifested any hazardous waste from their facility between 1980 and 1989. Grignard reportedly received a shipment of PCB contaminated transformer oil from G&S Motor Equipment Company in 1981. According to Grignard's response to a "Request for Information" dated January 8, 1991, indicates they are no way related to G&S Motor Equipment Company. High concentrations of PCBs (Arcolor-1248) was detected in the previously noted sediment sample.

Another potential source of contamination is Coronet Chemical Company. The company reclaimed napthalene from spent teflon etching solutions in building #9 during the early eighties. Waste generated from the reclamation process was disposed in a dumpster. Leaking drums of napthalene were observed during RCRA inspections at the facility. The location of the dumpster and leaking drums are not known. However, discharges from either source could seep into the ground or migrate into the drain on the west side of Coronet Chemical.

Coronet Chemical was also developing a sodium dispersion to destroy PCBs. However, it is not known if the company inventory of hazardous substance included PCBs. It should be noted that high concentrations of napthalene and PCBs were detected in sediment sample (SED-5) collected on October 14, 1988. Coronet Chemical was evicted from the facility in 1986. Numerous drums containing metallic sodium were abandoned in building #4. This

# FOUNDRY STREET COMPLEX

	roi	BFOCK	BUILDING MUMBER	COMPANY	OCCUPANCY (APPROXIMATE)
	4	5005	e <b>#1</b>	RFE Industries	01/01/78 - Present
				Amelio Hetos	Circa 1972
			<u> </u>	Conus Chemical	12/01/84 - 11/30/89
ر			ez e ézv	Berg Chemical Company Inc.	11/01/84 - 10/31/87
				Corus Chesical	12/01/84 - 11/30/89
				Grignard Chamical Company Inc.	03/01/75 - 10/01/84
				Honig Chemical and Processing	1970 - 1975
			<b>#</b>	Horret Truck Repair	Unknown - Present
				Coronet Chemical Company	12/12/83 - 12/20/84
			<b>6</b> 13	Destroyed	Circe 1962
			. 814	County Lift Truck Service	11/15/85 - Present
			<b>#</b> 15	ASC Demolitien	Unknown - 11/89
			#17	CMC Industries Inc.	1985 - 1991
, ,				Leber's Trucking	
				Essex Chemical	Circo 1971
			<b>#18</b>	CMC Industries Inc.	09/01/76 - 08/01/87
			<b>#36</b>	CMC industries inc.	09/01/76 - 08/01/87



# Site Investigation Report

The Arkansas Company 185 Foundry Street Newark, NJ

Prepared for

The City of Newark Department of Engineering 920 Broad Street Newark, NJ 07102

Prepared By

Metcalf & Eddy, Inc.
PO Box 1500
Somerville, NJ 08876
M&E Project # 018237-0001

February, 1997

# 3.3.1 Soil, Residue, Sediment and Residual Liquid Samples

# Sample # Location

# Description

Pond Area These soil samples were analyzed for Priority Pollutant + 40
Peaks (PP+40). The Residential Direct Contact Clean-up
Criteria (RDC) were exceeded in one or more of these samples
for antimony, cadmium, nickel, and Bis(2-ethylhexyl)phthalate.
Both-the-RDC and Non-Residential Direct-Contact-Cleanup,
Criteria (NRDC) were exceeded in one or more samples by a
number-of-additional organic and inorganic compounds,
including lead, dieldrin, and PCB Arochlor—1248. The Impact
to Groundwater (IGW) Soil Clean-up Criterion for fluoranthene
was exceeded at S1 and S3. The IGW for Pyrene was exceeded
at S1.

AK4 Between This sample consisted of surface soil/debris, collected Bldg. 28 over what appeared to be a concrete pad. The sample was & Pond analyzed for PP+40, and exhibited results similar to those found in the pond area.

AK5 East of Pond This sample, consisting of soil and demolition debris, was analyzed for Priority Pollutant Volatile Organics + 15 peaks (VOA+15), base-neutral compounds + 15 peaks (BN+15), petroleum hydrocarbons (TPH) and bulk asbestos. It exhibited many of the constituents found in samples 1-4, but in markedly lower concentrations. RDC=and=NRDC=levels=were=only=exceeded=for=various=semi=volatile=compounds;=with=levels=of metals;=pesticides;=and=PCBs=satisfying=applicable=cleanup' criteria. It also contained 5% asbestos (chrysotile), based upon a visual estimation using EPA Method 600/M4-82-020, December 1982.

AK6 East of Pond This sample, also consisting of soil and demolition debris, was analyzed for VOA + 15, BN+15, TPH and bulk asbestos. One compound (benzo(b)fluoranthene) exceeded the RDC. The sample also exhibited a 3% asbestos (chrysotile) content, based upon a visual estimation using EPA Method 600/M4-82-020, December 1982.

AK7-10 North of Bldg. 28 Iarge pile of demolition debris located in the areas formerly located by buildings #25 and #27. Sample 7 was analyzed for PP+40, while the remaining samples were analyzed for VOA+15, BN+15, TPHC, and bulk asbestos. Results similar to those for samples 5 and 6 were encountered in these samples. Residential and, in some cases, non-residential cleanup standards were exceeded by a number of semivolatile compounds, with

# 3.4 Reliability of Analytical Data

A review of the laboratory deliverables checklist, laboratory chronicle, sample holding time checklist and non-conformance summary sheets indicates that the analytical data achieved the reliability requirements for compliance, as outlined in NJAC 7:26E-3.10(b)3. The NJ-approved lab did not exceed sample holding times. The method detection limits were attained and analysis was performed in accordance with the appropriate analytical method.

# 3.5 Conclusions

Based upon the findings of the PA and initial site investigation, M&E reached a number of preliminary conclusions regarding the type and extent of environmental contamination at the former Arkansas Company facility.

- 1. EPA's conclusion that "natural resources...were not directly affected by the release that occurred at this site" appears to have been in error. The soil and residue samples collected at the Arkansas facility contained a variety of organic and inorganic contaminants. While-only-one-sample-contained-volatile-organics in excess-of-soil-elean-up-criteria, there were numerous-samples-which-exceeded-soil-elean-up-criteria-for-semi-volatile-organics, pesticides, PCBs, and metals.
  - The semi-volatile compounds detected at the site appear to be related to the manufacture of waterproofing additives.
  - The source of dieldrin and aldrin detected in site soils and building residues is unknown, but may be related to the production of fungicides, mildecides and mothproofing agents by the Arkansas Company. However, no pesticides were listed in the EPA inventory. The highest concentration of dieldrin detected in soil was found in sample S-11, collected from the approximate location of an alleged discharge of unidentified containerized materials. It is possible that the drummed materials contained dieldrin and other related pesticides.
  - White there is no record of PCB containing materials having been used at the facility, it is presumed that the detected PCBs originated from electrical equipment formerly used at the facility.
  - There appear to be multiple sources for the metals detected at the site. Fill material is widespread across the site and historical data for the Newark area indicate that fill materials derived from incinerator ash or similar materials contain significant concentrations of a wide range of metals. However, elevated concentrations detected in residue and liquid samples from inside the building suggest that process materials used by the Arkansas Company may have been a source of metals contamination. Washing of the building interior by the EPA may account for the high concentrations of metals detected in the building sump and the pond area.

Sample #	<u>Findings</u>
AK33	The RDC were exceeded by benzo(a)anthracene, chrysene, dieldrin, Arochlor-1248, cadmium and lead. Both the RDC and NRDC were exceeded by benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene, and arsenic (RDC and NRDC criteria are both 20 ppm for arsenic.
AK34	The RDC were exceeded by dieldrin, and cadmium. Both the RDC and NRDC were exceeded by benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene, and lead.
AK35	The IGW criteria were exceeded by anthracene, fluoranthene, pyrene, benzo(b)fluoranthene, and benzo(a)pyrene. The=RDC=were=exceeded by=Aroclor=1248, cadmium, and lead. Both the RDC and NRDC were exceeded by benzo(a)anthracene, chrysene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene, and dieldrin.
AK36	The IGW criteria was exceeded by chrysene. The RDC were exceeded by cadmium, and lead. Both the RDC and NRDC were exceeded by benzo(a)anthracene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene, dieldrin, and arsenic
AK37	The IGW criteria were exceeded by fluoranthene, and benzo(b)fluoranthene. The RDC were exceeded by Arochlor-1248 and cadmium. Both the RDC and NRDC were exceeded by benzo(a)anthracene, chrysene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene, dieldrin,arsenic, lead, and zinc.
AK38	The IGW criteria were exceeded by fluoranthene, pyrene, benzo(b)fluoranthene, benzo(a)pyrene, and indeno(1,2,3-cd)pyrene.  The RDC were exceeded by dieldrin, Aroclor-1248, cadmium and lead.  Both the RDC and NRDC were exceeded by benzo(a)anthracene, chrysene, benzo(k)fluoranthene, dibenz(a,h)anthracene, and arsenic.
AK39	The IGW were exceeded by fluoranthene, pyrene, and benzo(b)fluoranthene. The RDC were exceeded by dieldrin, Aroclor 1248, cadmium, and lead. Both the RDC and NRDC were exceeded by benzo(a)anthracene, chrysene, benzo(k)fluoranthene, dibenz(a,h)anthracene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, arsenic, and lead.
AK40	The RDC were exceeded by Benzo(a)anthracene, bis(2-Ethylhexyl)phthalate, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, dieldrin, and lead. Both the RDC and NRDC were exceeded by benzo(b)fluoranthene, benzo(a)pyrene, and arsenic.

# Section 5 - Recommendations for Additional Investigation And/Or Remediation

The impact of historical manufacturing and material handling/disposal practices on soil and groundwater at the Arkansas Company site has been largely defined within the scope of the PA/SI process. EPA's conclusion that "natural resources...were not directly affected by the release that occurred at this site" appears to been in error. The soil, residue and groundwater samples collected at the Arkansas facility contain a variety of organic and inorganic contaminants. While only one sample contains volatile organics in excess of soil clean-up-criteria, numerous samples exceed soil clean-up-criteria for semi-volatile organics, pesticides, PCBs; and metals. In addition, a number of areas within the building contain residue which presents a potential impact to groundwater and/or a threat to human health via direct contact.

While no further sampling or investigation is warranted as part of the PA/SI activities at this site, known or potential AOCs will have to be further delineated and/or remediated, in order to mitigate their impact upon the environment and/or to address issues of environmental liability prior to transfer of the property. M&E's recommendations are listed below:

• The pond and trench will require remediation. This area contains numerous contaminants above RDC, NRDC and IGW criteria. According to Section D-D of the 1945 Sanborn Map, this area appears to have been a historically low-lying area of the property. It was apparently excavated to enhance its ability to collect stormwater runoff from the Arkansas facility and/or neighboring properties. Unfortunately, the high groundwater table at the site places a severe limit on the pond's holding capacity. As a result, the pond is subject to flooding after heavy rains. That flooding presents a possible mechanism for the spread of contaminants out of the pond area, along the ground surface. In addition, the pond presents an on-going source of potential groundwater contamination.

Development of the property will necessitate remediation of soil and regrading of the pond area, in order to protect the safety of future occupants and alleviate stormwater flooding. Remediation will be preceded by a remedial investigation to fully delineate the vertical and horizontal extent of contamination.

• The sump in the northeast corner of the building should be remediated. This unit contains contaminants above the RDC, NRDC and IGW criteria. Because the unit may be hydraulically connected to groundwater at the site, the liquid, sludge and debris should be removed from it. The sludge, debris, and possibly water, will require characterization for disposal as RCRA hazardous waste. After emptying, the integrity of the unit must be assessed. If there are, in fact, breaches in the bottom of the unit, it and the surrounding contaminated soil should be removed and characterized for disposal in accordance with applicable regulations.





# TABLE 1 ANALYTICAL SUMMARY OF SOIL, RESIDUE, AND SLUDGE SAMPLES WITH CONTAMINANTS DETECTED ABOVE CLEANUP CRITERIA ARKANSAS CHEMICAL CO.

			NE	EWARK, I	<b>NEW JERS</b>	EY						
Sample ID	Residential	Non-Residential	Impact to	AK-01	AK-02	AK-03	AK-04	AK-05	AK-06	AK-07	AK-09	AK-10
Lab Sample Number	Direct Contact	Direct Contact	Groundwater	31387	31388	31389	31390	31391	31392	31393	31395	31396
Sampling Date	Soil Cleanup	Soil Cleanup	Soil Cleanup	10/03/95	10/03/95	10/03/95	10/03/95	10/03/95	10/03/95	10/03/95	10/03/95	10/03/95
Dilution Factor	Criteria (ug/kg) (1)	Criteria (ug/kg) (2)	Criteria (ug/kg) (3)	1.0	100.0	100.0	1.0	1.0	1.0	_1.0	1.0	1.0
VOLATILE COMPOUNDS (ug/kg)												
Chlorobenzene	37,000	680,000	1,000							1	1	<u></u>
SEMIVOLATILE COMPOUNDS (ug/kg)				1			ļ					
Anthracene	10,000,000	10,000,000	100,000	1	[		110000	1	ļ	<b>\</b>	<b>\</b>	
Fluoranthene	2,300,000	10,000,000	100,000	150000	l :	100000	530000					
Pyrene	1,700,000	10,000,000	100,000	130000			410000		İ			].
Benzo(a)anthracene	900	4,000	500,000	74000	41000	55000	200000	16000	1	10000	}	2400
Chrysene	9,000	40,000	500,000	79000	44000	54000	200000	17000	İ	14000		j
bis(2-Ethylhexyl)phthalate	49,000	210,000	100,000			53000				1		
Benzo(b)fluoranthene	900	4,000	50,000	92000	64000	l	260000	23000	1100	18000	1500	3600
Benzo(k)fluoranthene	900	4,000	500,000	34000	24000	34000	94000	9800		6900		1500
Benzo(a)pyrene	660	660	100,000	65000	42000	60000	190000	17000	ì	13000	970	2600
Indeno(1,2,3 – cd)pyrene	900	4,000	500,000	39000	28000	33000	93000	6400	į.	7600		930
Diberz (a.h) anthracene	660	560	100,000	12000	10000	11000	30000	1800		1400		
PP Pest/PCBs (ug/kg)							T			T		
Aldrin	40	170	50,000	[				Į	ł	Į		Į.
4,4'-DDD	3,000	12,000	50,000	1		)	]			1	Ì	
Dieldrin	42	180	50,000	500	380	750	610			100		
PCB-1248-*	490	2,000	50:000	3:000	4.200	7:800 📧	1:800	- 0				
METALS (mg/kg)												
Antimony	14	1	1	22.7		30.7	<u> </u>		į.	· (		ţ
Arsenic	20	I .	N. Committee of the com	45.8	43.0	79.7		į		[		l .
Cadmium	1	100		9.1	5.4	13.9	3.3	1	1	1.7	1	1
Copper	600	1	1		1		1	1	1			!
Lead	400(4)			1160	887	1780	559	i		1		ţ
Nickel	25	1	1	108	76.0	208	82.9	į.	1	1	Į.	1
Zinc	1500	1500	NA NA	2780	1800	5350	l	1	I	L	1	l

NOTES

mg/kg = milligrams per kilogram (parts per million – PPM) ug/kg = micrograms per kilogram (parts per billion – PPB)

- (1) RDC Criteria are based on NJDEP 3 February 1994 Residential Contact Soli Cleanup Criteria.
- (2) NRDC Criteria are based on NJDEP 3 February 1994 Non-Residential Contact Soil Cleanup Criteria.
- (3) IGW Criteria are based on NJDEP 3 February 1994 Impact to Groundwater Soil Cleanup Criteria.
- (4) Revised July 20, 1994
- \* Values listed reflect the combined standards for "Total PCBs"

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# TABLE 1 (Continued) ANALYTICAL SUMMARY OF SOIL, RESIDUE, AND SLUDGE SAMPLES WITH CONTAMINANTS DETECTED ABOVE CLEANUP CRITERIA ARKANSAS CHEMICAL CO.

NEWARK, NEW JERSEY

			NEWA!	RK, NEW JE	HOEY					
Sample ID	Residential	Non-Residential	Impact to	AK-11	AK-16	AK-17	AK-18	AK-19	AK-20	AK-21
Lab Sample Number	Direct Contact	Direct Contact	Groundwater	31397	31488	31487	31488	31489	31490	31491
Sampling Date	Soil Cleanup	Soil Cleanup	Soil Cleanup	10/03/95	10/04/95	10/04/95	10/04/95	10/04/95	10/04/95	10/04/95
Dilution Factor	Criteria (ug/kg) (1)	Criteria (ug/kg) (2)	Criteria (ug/kg) (3)	1.0	50.0	1.0	50.0	1.0	500.0	1.0
VOLATILE COMPOUNDS (ug/kg)										
Chlorobenzene	37,000	880,000	1,000			<u> </u>	1800		1	
SEMIVOLATILE COMPOUNDS (ug/kg)			I						I	
Anthracene	10,000,000	10,000,000	100,000			1	1		1	ĺ
Fluoranthene	2,300,000	10,000,000	100,000				110000		{	
Pyrene	1,700,000	10,000,000	100,000		}	ľ	] ]		}	-
Benzo(a)anthracene	900	4,000	500,000				45000		1	
Chrysene	9,000	40,000	500,000	l		ſ	48000			Ì
bis (2 - Ethylhexyl) phthalate	49,000	210,000	100,000	}		}	1,100,000		)	
Benzo(b)fluoranthene	900	4,000	50,000	ĺ	ļ		56000	1100		Ì
Benzo(k)fluoranthene	900	4,000	500,000			1	22000			
Benzo(a)pyrene	660	560	100,000	ļ			42000			}
Indeno(1,2,3 - cd)pyrene	900	4,000	500,000		1		28000			İ
Dibenz(a.h)anthracene	660	660	100,000				7500		<u>.l</u>	
PP Pest/PC8s (ug/kg)				ŀ	Į		į į			1
Aldrin	40	170	50,000		Į.	Į.	5,500		1	1
4.4'~DDD	3,000				ĺ	i	1			
Dieldrin	42	180	1	1,100	{	1	8,100	•		
PCB 1248	490	2.000	50:000	· 2016年1月1日   1200年1月1日   1200年1月1日   1200年1日	7 10 2 2	GELES ASSESSED	3.000		_	
METALS (mg/kg)		1		1	}	1			1	1
Antimony	14	340	2		1	16.6	31.2	19.3	25.4	
Arsenic	20	20	1			1	90.5	67.5	29.0	
Cadmium	1	100	1	1.7	2.1	19.7	28.7		8.8	3.4
Copper	800	I.	1			1	}	665	1	l
Lead	400(4)	600	NA NA	}	1	2240	1620	592	2310	4430
Nickel	25	2,400		412	902	175	181	3120	71.6	71.1
Zinc	1,500	1,500	NA NA	<u> </u>	1720	23500	38800		27100	5610

NOTES

mg/kg = milligrams per kilogram (parts per million - PPM)

ug/kg = micrograms per kilogram (parts per billion - PPB)

- (1) RDC Criteria are based on NJDEP 3 February 1994 Residential Contact Soil Cleanup Criteria.
- (2) NRDC Criteria are based on NJDEP 3 February 1994 Non-Residential Contact Soil Cleanup Criteria.
- (3) IGW Criteria are based on NJDEP 3 February 1994 Impact to Groundwater Soil Cleanup Criteria.
- (4) Revised July 20, 1994
- \* Values listed reflect the combined standards for "Total PCBs"



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# TABLE 1 (Continued) ANALYTICAL SUMMARY OF SOIL, RESIDUE, AND SLUDGE SAMPLES WITH CONTAMINANTS DETECTED ABOVE CLEANUP CRITERIA ARKANSAS CHEMICAL CO.

NEWARK MEN IEDSEN

	·/		NEWARK, I							
Sample ID	Residential	Non-Residential	Impact to	AK-23	AK-24	AK-25	AK-26	AK-27	AK-28	AK-29
Lab Sample Number	Direct Contact	Direct Contact	Groundwater	55994	55995	55998	55997	55998	55999	58000
Sampling Date	Soil Cleanup	Soil Cleanup	Soil Cleanup	07/18/96	07/18/96	07/18/96	07/18/96	07/18/96	07/18/96	07/18/96
Dilution Factor	Criteria (ug/kg) (1)	Criteria (ug/kg) (2)	Criteria (ug/kg) (3)	10.0	5.0	20.0	2.0	10.0	20.0	20.0
VOLATILE COMPOUNDS (ug/kg)				į	1	1		}		1
Chlorobenzene	37,000	680,000	1,000		<u> </u>					
SEMIVOLATILE COMPOUNDS (ug/kg)				T	T	T				
Anthracene	10,000,000	10,000,000	100,000	}			1	ì	1	
Fluoranthene	2,300,000	10,000,000	100,000	į	l	100,000	1	1	150,000	170,000
Pyrene	1,700,000	10,000,000	100,000	]	Į.	1		1	110,000	130,000
Benzo(a)anthracene	900	4,000	500,000	4,300	5,600	41,000	1,300	29,000	65,000	84,000
Chrysene	9,000	40,000	500,000		l	40,000		30,000	71,000	91,000
bis (2 - Ethylhexyl) phthalate	49,000	210,000	100,000		1	1	1	İ	1	ł
Benzo(b)fluoranthene	900	4,000	50,000	5,500	6,600	47,000	1,800	40,000	81,000	110,000
Benzo(k)fluoranthene	900	4,000	500,000	1,700	2,400	20,000	Í	15,000	32,000	41,000
Benzo(a)pyrene	660	660	100,000	4,500	4,800	39,000	1,300	31,000	62,000	81,000
Indeno(1,2,3 – cd)pyrene	900	4,000	500,000	2,500	2,300	15,000	İ	14,000	34,000	40,000
Diberz (a.h) anthracene	660	660	100,000	910	870	4.400		4.100	11,000	14,000
PP Pest/PCBs (ug/kg)			1		Ţ					
Aldrin	40	170	50,000							
Dieidrin	42	180	50,000	160	73	140	140	140	100	250
PCB-1248	490	2:000	50,000	SETTIME TRANSPORT THE PARTY OF		1				
METALS (mg/kg)	1				T		T			T
Antimony	14	340	NA	}	1	1	}	]		
Arsenic	20	20	NA NA		l			1	}	1
Cadmium	1	100	NA NA	3.6	1	1	1.6	1.3	1.7	2.0
Copper	600	600	NA.	1	1	1		2,000	1	
Lead	400(4)	600	NA.	ļ	(		1	894	563	449
Nickel	25	2,400	NA.	1	1	1		1040	252	424
Zine	1,500	1,500	NA NA	<u> </u>	1	1			1	

NOTES

mg/kg ≈ milligrams per kilogram (perts per million - PPM) ug/kg = micrograms per kilogram (parts per billion - PPB)

- (1) RDC Criteria are based on NJDEP 3 February 1994 Residential Contact Soil Cleanup Criteria.
- (2) NRDC Criteria are based on NJDEP 3 February 1994 Non-Residential Contact Soll Cleanup Criteria.
- (3) IGW Criteria are based on NJDEP 3 February 1994 Impact to Groundwater Soil Cleanup Criteria.
- (4) Revised July 20, 1994
- \* Values listed reflect the combined standards for "Total PCBs"

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# TABLE 1 (Continued) ANALYTICAL SUMMARY OF SOIL, RESIDUE, AND SLUDGE SAMPLES WITH CONTAMINANTS DETECTED ABOVE CLEANUP CRITERIA ARKANSAS CHEMICAL CO.

NEWARK NEW JERSEY

			NEWARK,	MEM JEH	5E1					
Sample ID	Residential	Non-Residential	Impact to	AK-30	AK-31	AK-32	AK-33	AK-34	AK-35	AK-36
Lab Sample Number	Direct Contact	Direct Contact	Groundwater	56001	56002	56003	56004	58005	56006	56007
Sampling Date	Soil Cleanup	Soll Cleanup	Soll Cleanup	07/18/96	07/18/96	07/18/96	07/18/96	07/18/96	07/18/96	07/18/96
Dilution Factor	Criteria (ug/kg) (1)	Criteria (ug/kg) (2)	Criteria (ug/kg) (3)	20.0	2.0	5.0	5.0	5.0	50.0	5.0
VOLATILE COMPOUNDS (ug/kg)										
Chlorobenzene	37,000	680,000	1.000		L				L	
SEMIVOLATILE COMPOUNDS (ug/kg)										1
Anthracene	10,000,000	10,000,000	100,000						110,000	
Fluoranthene	2,300,000	10,000,000	100,000	120,000	1	}	}	1	600,000	}
Pyrene	1,700,000	10,000,000	100,000	ĺ					450,000	1
Benzo(a)anthracene	900	4,000	500,000	56,000	5,600	7,000	11,000	48,000	270,000	18,000
Chrysene	9,000	40,000	500,000	51,000	}	1	12,000	49,000	280,000	20,000
bis (2 - Ethylhexyl) phthalate	49,000	210,000	100,000	Ì				f		
Benzo(b)fluoranthene	900	4,000	50,000	71,000	7,800	8,800	15,000	60,000	330,000	25,000
Benzo(k)fluoranthene	900	4,000	500,000	28,000	2,900	3,400	5,500	21,000	120,000	9,700
Benzo(a)pyrene	660	660	100,000	57,000	5,600	6,900	10,000	42,000	200,000	17,000
Indeno(1,2,3-cd)pyrene	900	4,000	500,000	27,000	3,300	3,800	4,700	19,000	95,000	6,700
Dibenz(a,h)anthracene	660	660	100,000	7.700	1.000	1,100	1.500	5.800	32.000	2.400
PP Pest/PCBs (ug/kg)										
Aldrin ·	40	170	50,000	l .	ļ	}	1	\	<b>\</b>	
4,4'~DDD	3,000	12,000	50,000	1	1		l	ļ	1	
Dieldrin	42	180	50,000	180	120	59	51	88	280	210
PCB-1248-	490	2.000	50,000		- State Mary Mary 1871		850	W. A Work MICH.	1:100	<u> </u>
METALS (mg/kg)		· ·								
Antimony	14	340	1						ŀ	
Arsenic	20	20		ì	)	1	31.8	)	1	25
Cadmium	1	100		2.0	1.9	1.2	3,5	3.1	2.1	1.6
Copper	600	600	1	1	İ	1	1	-	{	
Lead	400(4)	500		476	581	1	582	777	]	491
Nicket	25	2,400	1				1		1	
Zinc	1,500	1,500	NA NA	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		.1
VOTEO.										

NOTES

mg/kg = milligrams per kilogram (parts per million - PPM) ug/kg = micrograms per kilogram (parts per billion - PPB)

- (1) RDC Criteria are based on NJDEP 3 February 1994 Residential Contact Soil Cleanup Criteria.
- (2) NRDC Criteria are based on NJDEP 3 February 1994 Non-Residential Contact Soil Cleanup Criteria.
- (3) IGW Criteria are based on NJDEP 3 February 1994 Impact to Groundwater Soil Cleanup Criteria.
- (4) Revised July 20, 1994
- \* Values listed reflect the combined standards for "Total PCBs"



BEBAVAR KHIT

# TABLE 1 (Continued) ANALYTICAL SUMMARY OF SOIL, RESIDUE, AND SLUDGE SAMPLES WITH CONTAMINANTS DETECTED ABOVE CLEANUP CRITERIA ARKANSAS CHEMICAL CO.

NEWARK NEW JERSEY

		NE.	WARK, NEW	JEHSEY					
Sample ID	Residential	Non-Residential	Impact to	AK-37	AK-38	AK-39	AK-40	AK-41	AK-42
Lab Sample Number	Direct Contact	Direct Contact	Groundwater	56008	56009	56010	56011	56012	56013
Sampling Date	Soil Cleanup	Soll Cleanup	Soil Cleanup	07/18/96	07/18/96	07/18/96	07/18/96	07/18/96	07/18/96
Dilution Factor	Criteria (ug/kg) (1)	Criteria (ug/kg) (2)	Criteria (ug/kg) (3)	10.0	20.0	10.0	10.0	5.0	5.0
VOLATILE COMPOUNDS (ug/kg)	'			]					
Chlorobenzene	37,000	680,000	1,000			<u>                                     </u>		1	
SEMIVOLATILE COMPOUNDS (ug/kg)									
Anthracene	10,000,000	10,000,000	100,000	ĺ		ĺ	İ	1	ı
Fluoranthene	2,300,000	10,000,000	100,000	110,000	300,000	130,000	Ĭ	j	İ
Pyrene .	1,700,000	10,000,000	100,000	[	220,000	110,000		-	1
Benzo(a)anthracene	900	4,000	500,000	51,000	140,000	65,000	3,500	16,000	2,700
Chrysene	9,000	40,000	500,000	57,000	150,000	84,000	İ	16,000	1
bis (2 - Ethylhexyl) phthalate	49,000	210,000	100,000	Į			79,000	}	1
Benzo(b)fluoranthene	900	4,000	50,000	68,000	180,000	87,000	7,800	18,000	4,600
Benzo(k)fluoranthene	900	4,000	500,000	25,000	63,000	34,000	2,500	7,500	1,500
Benzo(a) pyrene	660	660	100,000	43,000	120,000	57,000	3,300	13,000	2,400
indeno(1,2,3 – cd)pyrene	900	4,000	500,000	15,000	47,000	20,000	1,200	8,700	1,800
Diberg (a.h)anthracene	660	660	100,000	5.700	4.900	6,000		2,400	
PP Pest/PCBs (ug/kg)									7
Aldrin ·	40	170	50,000	1	}	1	1		i
4,4'-DDD	3,000	12,000	50,000	3800	l	Į.	ł	1	
Dieldrin	42	180	50,000	180	80	120	130	140	1
PCB 1248 *	490	//www	50:000	1,600	520	<u> </u>			<u> </u>
METALS (mg/kg)				1	[	1			
Antimony	14	340	) NA	1	1	1	1	23	
Arsenic	20	20	NA.	30.7	31.2	20.2	21.9	35.9	
Cadmium	1	100	NA NA	2.4	5.8	4.6	1	5.4	6.8
Copper	600	600	NA.	ļ	1	}	}	611	1
Lead	400(4)	500	NA.	640	573	734	435	1,730	
Nickel	25	2,400	NA.		1	1			1
Zinc	1,500	1,500	NA NA	1,960	\	<u></u>	<u> </u>		1

NOTES

mg/kg = milligrams per kilogram (parts per million -- PPM) ug/kg = micrograms per kilogram (parts per billion -- PPB)

- (1) RDC Criteria are based on NJDEP 3 February 1994 Residential Contact Soli Cleanup Criteria.
- (2) NRDC Criteria are based on NJDEP 3 February 1994 Non-Residential Contact Soil Cleanup Criteria.
- (3) IGW Criteria are based on NJDEP 3 February 1994 Impact to Groundwater Soil Cleanup Criteria.
- (4) Revised July 20, 1994
- \* Values listed reflect the combined standards for "Total PCBs"



BEB82/NWKARK

# TABLE 2 ANALYTICAL SUMMARY OF SOIL, RESIDUE, AND SLUDGE SAMPLES ARKANSAS CHEMICAL CO.

NEWARK NEW JERSEY

			NEWARK, NE	M JEHSE	Y					
Sample ID	Residential	Non-Residential	Impact to	AK-01	AK-02	AK-03	AK-04	AK-05	AK-06	AK07
Lab Sample Number	Direct Contact	Direct Contact	Groundwater	31387	31388	31389	31390	31391	31392	31393
Sampling Date	Soil Cleanup	Soil Cleanup	Soil Cleanup	10/03/95	10/03/95	10/03/95	10/03/95	10/03/95	10/03/95	10/03/95
Dilution Factor	Criteria_(ug/kg)_(1)_	Criteria (ug/kg) (2)	Criteria (ug/kg) (3)	1.0	100.0	100.0	1.0	1.0	1.0	1.0
RCB 1016 *	490	2,000	50;000	600 U	850-U-	1600-U	380°U	NA	NA	77°U
PCB 1221 *	490	2,000	50,000	600 U	850 U	1800 U	360 U	NA.	NA.	77 U
PCB 1232 *	490	2,000	50,000	600 U	850 U	1600 U	380 U	NA.	NA.	77 U
PCB 1242 *	490	2,000	50,000	600 U	850 U	1600 U	360 U	NA.	NA.	77 U
PCB 1248 *	490	2,000	50,000	3000	4200	7800	1800	NA.	NA.	160 U
PCB 1254 *	490	2,000	50,000	1400 U	1700 U	3800 U	1200 U	NA.	NA.	77 U
PCB 1260 *	490.	2,000_	50,000	190-U-	350 U	480 U	220 U	NA	NA	_ 77 U
METALS (mg/kg)										
Antimony	14	340	NC	22.7	11.3	30.7	3.4	NA	NA.	0.47 U
Arsenic	20	20	NC	45,8	43.0	79.7	12.7	NA.	NA.	3.8
Beryllium	1	1	· NC	0.42	0.46	0.59	0.29	NA.	NA.	0.23
Cadmium	1	100	NC	9.10	5.4	13,9	3.3	NA.	NA.	1.7
Chromium	NC	) NC	NC.	163	115	460	70.7	NA.	NA.	13.2
Copper	600	600	NC	240	152	424	255	NA.	NA	17.0
Lead .	400(4)	600	NC.	1160	887	1780	559	NA NA	NA.	344
Mercury	14	270	NC	2.1	2.1	3.6	1.2	NA.	NA.	0.60
Nickel	25	2400	NC	108	76.0	208	82.9	NA.	NA.	9.6
Sələnium	63	3100	NC.	1.2	4.1	1.6	1.8	) NA	NA	0.71
Silver	110	4100	NC	1.6	1.00	2.4	0.62	NA.	NA.	0.092 U
Thallium	2	2	NC.	4.9 U	2.3 U	10.9 U	1.1 U	NA.	NA NA	2.5 ∪
Zinc	1500	1500	NC NC	2780	1800	5350	847	NA.	NA	1180
WET CHEM TESTS				1				ļ		
Total Petroleum Hydrocarbons (ppm)	10,000 ppm (5)	10,000 ppm	10,000 ppm	NA	NA	NA	NA	1150	1820	NA
pH (std units)	NC NC		NC	NA NA	NA NA	NA NA	NA_	NA .	NA _	NA

### NOTES

mg/kg = milligrams per kilogram (parts per million - PPM)

ug/kg = micrograms per kilogram (parts per billion - PPB)

J = Indicates an estimated value below the Method Detection Limit

B = Compound found in associated blank as well as in sample

NA = Not Analyzed

NC = No Criteria

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- (3) IGW Criteria are based on NJDEP 3 February 1994 Impact to Groundwater Soil Cleanup Criteria.
- (4) Revised July 20, 1994
- (5) Health based criteria for total organic contaminants, including total petroleum hydrocarbons.

- \* Values listed reflect the combined standards for the cis and trans isomers of 1,3-Dichloropropene.
- \* Values listed reflect the combined standards for the 2,4/2,8-Dinitrotoluene mixture,
- \* Values listed reflect the combined standards for "Total PCBs"



# TABLE 2 ANALYTICAL SUMMARY OF SOIL, RESIDUE, AND SLUDGE SAMPLES ARKANSAS CHEMICAL CO. NEWARK NEW JERSEY

			IAC AAVUL	IAC AA OCITO	<u></u>					
Sample ID	Residential	Non-Residential	Impact to	AK-08	AK-09	AK-10	AK-11	AK-16	AK-17	AK-18
Lab Sample Number	Direct Contact	Direct Contact	Groundwater	31394	31395	31396	31397	31488	31487	31488
Sampling Date	Soil Cleanup	Soil Cleanup	Soil Cleanup	10/03/95	10/03/95	10/03/95	10/03/95	10/04/95	10/04/95	10/04/95
-Dilution-Eactor	_Criteria_(ug/kg)_(1)	Cnteria (ug/kg) (2)	_Criteria_(ug/kg)_(3)-	<del> 1.0 มหร.สหา</del>		<u> √18 %1-0</u>	1.0	50.0	1.0	50.0
PCB 1016 *	490	2,000	50,000	NA	NA	NA	80 U	NA	NĂ-	610-U-
PCB 1221 *	490	2,000	50,000	NA	NA	NA	75 U	NA.	NA	810-10
PCB 1232 *	490	2,000	50,000	NA.	NA	NA	180 U	NA	NA.	610 U
PCB 1242 *	490	2,000	50,000	NA	NA.	NA.	95 U	NA	NA	810 U
PCB 1248 *	490	2,000	50,000	NA	NA	NA	80 U	NA	NA	3000
PCB 1254 *	490	2,000	50,000	NA.	NA.	NA.	120 U	NA NA	NA	2000 U
PCB 1260 *	490-	2,000	50,000	NA:	- NA	NA:	90:U	NA_	NA	1300_U_
METALS (mg/kg)										
Antimony	14	340	NC.	NA.	NA.	NA.	10.5	5.8	16.6	31.2
Arsenic	20	20	NC.	NA	NA	NA NA	12.7	5.0	15.9	90.5
Beryllium	1	1	NC	NA	NA	NA.	0.13 U	0.16	0.24	0.46 U
Cadmium	1	100	NC	NA	NA	NA.	1.7	2.1	19.7	28.7
Chromium	NC	NC	, NC	NA.	NA	NA.	1770	409	251	153
Copper	600	500	NC	NA	NA.	NA.	99.3	145	272	483
Lead	400(4)	600	NC	NA.	NA	NA.	143	145	2240	1620
Mercury	14	270	NC	NA.	NA.	NA NA	3.1	1.6	1.1	1.5
Nickel	25	2400	NC.	NA	NA	NA NA	412	902	175	181
Selenium	63	3100	NC.	NA.	NA	) NA	1.8	0.82	1.2	15.9
Silver	110	4100	NC.	NA.	NA.	) NA	0,38 U	0.26 U	1.9	1.2 U
Thallium	2	2	NC.	NA.	NA.	NA.	0.26 U	0.37 U	0.25 U	0.70 U
Zinc	1500	1500	NC NC	NA.	NA NA	NA	351	1720	23500	38800
WET CHEM TESTS				{		1	1		1	
Total Petroleum Hydrocarbons (ppm)	10,000 ppm (5)	10,000 ppm	10,000 ppm	312	262	293	NA	1010	30500	11600
pH (std units)	NC.	NC NC		NA	NA	NA	NA NA	NA	NA_	NA

NOTES

mg/kg = milligrams per kilogram (parts per million - PPM)

ug/kg = micrograms per kilogram (parts per billion - PPB) J = Indicates an estimated value below the Method Detection Limit

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- (4) Revised July 20, 1994
- (5) Health based criteria for total organic contaminants, including total petroleum hydrocarbons.

- Values listed reflect the combined standards for the cis and trans isomers of 1,3-Dichloropropene.
- \* Values listed reflect the combined standards for the 2,4/2,6-Dinitrotoluene mixture.
- \* Values listed reflect the combined standards for "Total PCBs"



# TABLE 2 ANALYTICAL SUMMARY OF SOIL, RESIDUE, AND SLUDGE SAMPLES ARKANSAS CHEMICAL CO. NEWARK NEW JERSEY

			INCAAN	HK' NEM 1	ENOCI					
Sample ID	New Jersey	New Jersey	New Jersey Impact	AK-23a	AK-24	AK-25	AK-26	AK-27	AK28	AK~29
Lab Sample Number	Residential	Non-Residential	to Ground Water	55994	55995	55996	55997	55998	55999	56000
Sampling Date	Soil Cleanup	Soil Cleanup	Soil Cleanup	07/18/96	07/18/96	07/18/96	07/18/96	07/18/96	07/18/96	07/18/98
Dilution Factor	Criteria (ug/kg)-	Criteria (ug/kg)	Criteria (ug/kg)	10.0	5.0	20.0	2.0	10.0	20.0	10.0
Aroclor - 1016 *	490	2;000-	50,000:	100_U_	1-10-U	88 U	85 Ú	93-U	94-U=	====100°℃
Aroclor 1221 *	490	2,000	50,000	100 U	110 U	88 U	85 U	93 U	94 U	100 U
Aroclor 1232 *	490	2,000	50,000	100 U	110 U	88 U	85 U	93 U	94 U	100 U
Aroclor - 1242 *	490	2,000	50,000	100 U	110 U	88 U	85 U	93 U	94 U	100 U
Aroclor - 1248 *	490	2,000	50,000	100 U	110 U	88 U	85 U	93 U	94 U	100 U
Aroclor – 1254 *	490	2,000	50,000	270	110 U	88 U	85 U	93 U	94 U	100 ป
Aroclor - 1260-*	490	2,000	50,000	100_U	110_U	88:U	85-U	93_U_	. 94 U	100 ∰
-METALS (ug/kg)	<del></del>									
Antimony	14	340	NC	3.9	1.2	1.2	0.91 U	2.2	2.8	2.8
Arsenic	20	20	NC	13.4	3.9	3.3	3.4	6.3	9.7	8.3
Beryilium	1	1	NC	0.49	1.0	0.17	0.18	0.17	0.41	.0.36
Cadmium	1	100	NC NC	3.6	0.61	1.0	1.8	1.3	1.7	2.0
Chromium	NC	NC	NC	188	13.5	23.8	72.5	45.5	62.8	125
Copper	600	600	NC NC	88.9	52.9	82,1	132	2000	516	181
Lead .	400(4)	600	NC NC	359	111	135	103	894	563	449
Mercury	14	. 270	NC NC	6.5	1.4	0.93	0.52	1.0	2.0	1.9
Nickel	250	2400	NC NC	40.9	- 13.3	27.8	50.3	1040	252	424
Selenium	63	3100	NC	1.2 U	1.9	1.1 U	1.2	1.2 U	1.2 U	1.3 U
Silver	110	4100	NC NC	0.36 U	0.39 ∪	0.31 U	0.30 U	8.4	0.86	0.70
Thallium	2	2	NC	1.4 U	1.5 U	1.2 U	1.2 U	1.3 U	1.3 U	1.5 U
Zinc	1500	1500	NC	650	189	311	360	582	567	528
WET CHEM TESTS (mg/kg)						1				
Total Petroleum Hydrocarbons	10,000 ppm(5)	10,000 ppm	10,000 ppm	7170	NA	NA NA	NA.	NA	NA NA	NA NA

# NOTES

mg/kg = milligrams per kilogram (parts per million - PPM)

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- B = Compound found in associated blank as well as in sample

NA = Not Analyzed

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- \* Values listed reflect the combined standards for the cis and trans isomers of 1,3~Dichloropropene.
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- \* Values listed reflect the combined standards for "Total PCBs"



# TABLE 2 ANALYTICAL SUMMARY OF SOIL, RESIDUE, AND SLUDGE SAMPLES ARKANSAS CHEMICAL CO.

			NEV	VARK, NEW	JEHSEY					
Sample ID	New Jersey	New Jersey	New Jersey Impact	AK-30	AK-31	AK-32	AK-33	AK-34	AK-35	AK-38
Lab Sample Number	Residential	Non-Residential	to Ground Water	58001	56002	56003	56004	56005	56006	56007
Sampling Date	Soil Cleanup	Soil Cleanup	Soil Cleanup	07/18/96	07/18/96	07/18/96	07/18/96	07/18/98	07/18/96	07/18/96
Dilution Factor	-Criteria-(ug/kg)_	_Criteria_(ug/kg)	Cnteria_(ug/kg)	20.0	2.0	5:0 <u></u>	5:0	5.0	50:0	<b>5</b> .0
Aroclor=1016 *	490	2,000	50,000	92 U	86 U	89 U	110 U	100 U	140 U	110-07
Aroclor-1221 *	490	2,000	50,000	92 U	86 U	89 U	110 U	100 U	140 U	110 0
Aroclor 1232 *	490	2,000	50,000	92 U	88 U	89 U	110 U	100 U	140 U	110 4
Aroclor-1242 *	490	2,000	50,000	92 U	86 U	89 U	110 U	100 U	140 U	110 🔱
Aroclor-1248 *	490	2,000	50,000	92 U	88 U	130 U	660	100 U	1100	330 ∪∖
Aroclor – 1254 *	490	2,000	50,000	92 U	86 U	89 U	170 U	100 U	350 U	220 U
Aroctor=1260	490	2,000	50,000	92≅⊍=			170 U	100°U	350-17	1:10-U
METALS (ug/kg)										· ·
Antimony	14	340	NC	2.2	3.9	2.1	3.0	4.6	5.3	4.2
Arsenic	20	20	l NC	9.0	15.1	11.4	31.8	13.6	18,3	25.0
Beryllium	1	1	NC	0.40	0.25	0.34	0.33	0.30	0.23	0.23
Cadmium	1	100	NC.	2.0	1.9	1.2	3.5	3.1	30 am 2.1 500	1.6
Chromium	NC	NC	l NC	42.8	57.5	20.7	51.3	56.0	46.4	53.2
Copper	600	800	NC.	154	121	86.6	135	207	120	136
Lead	400(4)	600	NC	476	581	202	582	777	391	491
Mercury	14	270	NC	2.7	1.2	0.49	1.1	1.9	1,4	1.6
Nickel	250	2400	NC.	80.1	40.3	30.0	44.7	57.6	37.7	40.5
Selenium	63	3100	NC.	1.1 U	1.1	1.1 U	1.8	1.3	1.8 U	2.0
Silver	110	4100	NC	0.63	0.36	0.32 U	0.74	0.55	0.79	0.78
Thallium	2	2	NG	1.3 U	1.2 U	1.2 U	1.6 U	1.4 U	2.0 U	1.5 U
Zinc	1500	1500	NC.	528	608	453	1490	1130	725	812_
WET CHEM TESTS (mg/kg)										
Total Petroleum Hydrocarbons	10,000 ppm(5)	10,000 ppm	10,000 ppm	NA	NA NA	2000	2440	NA .	NA	NA_

### NOTES

mg/kg = milligrams per kilogram (parts per million - PPM)

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- \* Values listed reflect the combined standards for the 2,4/2,6-Dinitrotoluene mixture.
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# TABLE 2 ANALYTICAL SUMMARY OF SOIL, RESIDUE, AND SLUDGE SAMPLES ARKANSAS CHEMICAL CO. NEWARK NEW JERSEY

			145 447 (11)	INC AA DEUS	/ L I				
Sample ID	New Jersey	New Jersey	New Jersey Impact	AK-37	AK38	AK-39	AK-40	AK-41	AK-42
Lab Sample Number	Residential	Non-Residential	to Ground Water	56008	56009	56010	56011	58012	56013
Sampling Date	Soil Cleanup	Soil Cleanup	Soil Cleanup	07/18/96	07/18/96	07/18/98	07/18/96	07/18/98	07/18/98
Dilution Factor	_Criteria-(ug/kg)_	Criteria-(ug/kg)	Criteria-(ug/kg)	10:0	20.0	10:0	10.0	5.0	5.0
Aroclor=1016 *	490	2,000	50,000	130 U	160 U	170 U	100 U	110-6	110-U
Aroclor-1221 *	490	2,000	50,000	130 U	160 U	170 U	100 U	110 U	110 U
Aroclor-1232 *	490	2,000	50,000	130 U	160 U	170 U	100 U	110 U	110 U
Aroclor-1242 *	490	2,000	50,000	130 U	160 U	170 U	100 U	110 U	110 U
Aroclor – 1248 *	490	2,000	50,000	1600	520	350 U	100 U	270 U	110 U
Aroclor 1254 *	490	2,000	50,000	950 U	160 U	170 U	100 U	170 U	110 U
Aroclor - 1260 *	490-	2,000	50,000	130_U	<u></u> 160∗U <del></del>		100 U	170 U	110 U
-METALS (ug/kg)									The state of the s
Antimony	14	340	NC	6.0	6.2	7.9	6.2	23.0	2.7
Arsenic	20	20	NC	30.7	31,2	20.2	21.9	35.9	17.9
Beryllium	1	1	NC	0.30	0.40	0.51	0.25	0.42	0.63
Cadmium	1	100	NC	2.4	5.8	4.6	0.98	5.4	6.8
Chromium	NC.	NC	NC	83.1	68.3	54.3	20.0	117	22.9
Copper	600	600	NC	83.2	97.9	133	179	611	199
Lead	400(4)	600	NC	640	573	734	435	1730	235
Mercury	14	270	NC	1.5	1.4	3.3	0.25	0.80	0.57
Nickel	250	2400	NC	30.9	37.6	62.8	27.3	116	21.8
Selenium	63	3100	NC	1.7 U	2.1 B	2.6	2.4	3.3	2.7
Silver	110	4100	NC	0.66 B	0.71 B	7.1	0.60 B	3.8	0.40
Thallium	2	2	NC	1.9 U	2.2 ∪	2.4 U	1.5 U	1.5 ∪	1.5 U
Zinc	1500	1500	NC.	1960	1110	895	242	1300	672
WET CHEM TESTS (mg/kg)	1						ļ		
Total Petroleum Hydrocarbons	10,000 ppm(5)	10,000 ppm	10,000 ppm	6360	NA	NA NA	NA	NA NA	NA NA

# NOTES

mg/kg = milligrams per kilogram (parts per million - PPM)

ug/kg = micrograms per kilogram (parts per billion - PPB)

J = Indicates an estimated value below the Method Detection Limit

B = Compound found in associated blank as well as in sample

NA = Not Analyzed

NC = No Criteria

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- (3) IGW Criteria are based on NJDEP 3 February 1994 Impact to Groundwater Soli Cleanup Criteria.
- (4) Revised July 20, 1994
- (5) Health based criteria for total organic contaminants, including total petroleum hydrocarbons.

- \* Values listed reflect the combined standards for the cis and trans isomers of 1,3-Dichloropropene.
- \* Values listed reflect the combined standards for the 2,4/2,6-Dinitrotoluene mixture.
- \* Values listed reflect the combined standards for "Total PCBs"





# TABLE 2 ANALYTICAL SUMMARY OF SOIL, RESIDUE, AND SLUDGE SAMPLES ARKANSAS CHEMICAL CO. NEWARK NEW JERSEY

	,		INE AA	HK, NEW J	ENSET					
Sample ID	New Jersey	New Jersey	New Jersey Impact	AK-23	AK-24	AK~25	AK-26	AK-27	AK-28	AK-29
Lab Sample Number	Residential	Non-Residential	to Ground Water	55994	55995	55996	55997	55998	55999	56000
Sampling Date	Soil Cleanup	Soil Cleanup	Soil Cleanup	07/18/96	07/18/96	07/18/98	07/18/98	07/18/96	07/18/96	07/18/98
Dilution Factor	_Criteria (ug/kg)-	Criteria-(ug/kg)	Criteria_(ug/kg)	10.0	5.0,	20.0	2.0	10.0	20.0	10.0
Aroclor-1016	490	2,000	50,000	100 U	110 U	88 U	85 ป	93 U	94-0	100°U
Aroclor-1221 *	490	2,000	50,000	100 U	110 U	88 U	85 U	93 U	94 U	100 U/
Aroclor - 1232 *	490	2,000	50,000	100 U	110 U	88 U	85 U	93 U	94 ป	100 U
Aroclor – 1242 *	490	2,000	50,000	100 U	110 U	88 U	85 U	93 U	94 U	100 U
Aroclor 1248 *	490	2,000	50,000	100 U	110 U	88 U	85 U	93 U	94 U	100 ປ
Aroclor – 1254 *	490	2,000	50,000	270	110 U	88 U	85 U	93 U	94 U	-100 U
Aroclor_1260	490	2,000_	50,000	100-U-	110 U	88_U~	85 U	93 U	94 U	100 U
METALS (ug/kg)								-		
Antimony	14	340	NC	3.9	1.2	1.2	0.91 U	2.2	2.8	2.8
Arsenic	20	20	NC	13.4	3.9	3.3	3.4	6.3	9.7	8.3
Beryllium	1	1	NC	0.49	1.0	0.17	0.18	0.17	0.41	0.36
Cadmlum	1	100	NC	3.6	0.61	1.0	1.6 🛬	1.3	1.7	2.0
Chromium	NC.	NC.	NC	188	13.5	23.8	72.5	45.5	62.8	125
Copper	600	600	NC	88.9	52.9	82.1	132	2000	516	181
Lead	400(4)	800	NC)	359	111	135	103	894	563	449
Mercury	14	270	NC NC	6.5	1.4	0.93	0.52	1.0	2.0	1.9
Nickel	250	2400	NC	40.9	13.3	27.8	50.3	1040	252	424
Selenium	63	3100	NC	1.2 U	1.9	1.1 U	1.2	1.2 U	1.2 U	1.3 U
Silver	110	4100	NC	0.36 U	0.39 U	0.31 U	0.30 U	8.4	0.86	0.70
Thallium	2	2	NC	1.4 U	1.5 U	1.2 U	1.2 U	1.3 U	1.3 U	1.5 U
Zinc	1500	1500	NC	650	189	311	360	582	567	528
WET CHEM TESTS (mg/kg)	ļ		{		j	j				l
Total Petroleum Hydrocarbons	10,000 ppm(5)	10,000 ppm	10,000 ppm	7170	NA	NA NA	NA _	NA NA	NA	NA_

## NOTES

mg/kg = milligrams per kilogram (parts per million - PPM)
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B = Compound found in associated blank as well as in sample

NA = Not Analyzed

NC = No Criteria

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- (2) NRDC Criteria are based on NJDEP 3 February 1994 Non-Residential Contact Soil Cleanup Criteria.
- (3) IGW Criteria are based on NJDEP 3 February 1994 Impact to Groundwater Soil Cleanup Criteria.
- (4) Revised July 20, 1994
- (5) Health based criteria for total organic contaminants, including total petroleum hydrocarbons.

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- \* Values listed reflect the combined standards for the 2,4/2,8-Dinitrotoluene mixture.
- \* Values listed reflect the combined standards for "Total PCBs"

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# TABLE 2 ANALYTICAL SUMMARY OF SOIL, RESIDUE, AND SLUDGE SAMPLES ARKANSAS CHEMICAL CO. NEWARK NEW JERSEY

				AVIIIN IAL AA						
Sample ID	New Jersey	New Jersey	New Jersey Impact	AK-30	AK-31	AK-32	AK-33	AK-34	AK-35	AK-36
Lab Sample Number	Residential	Non-Residential	to Ground Water	56001	56002	56003	56004	56005	56006	56007
Sampling Date	Soil Cleanup	Soil Cleanup	Soil Cleanup	07/18/96	07/18/96	07/18/96	07/18/96	07/18/96	07/18/96	07/18/96
Dilution Eactor	Criteria (ug/kg)	_Criteria_(ug/kg)_	Criteria.(ug/kg)	20.0	2.0	5.0	5.0	5.0	50.0	5.0
Aroclor - 1018	490	2,000-	50,000-	92-U	86_U		-1-10-U-	100 U	1407U	110 04
Aroclor - 1221	490	2,000	50,000	92 U	86 U	89 U	110 U	100 U	140 U	110 U
Aroclor - 1232 *	490	2,000	50,000	92 U	86 U	89 U	110 U	100 U	140 U	110 년
Aroclor - 1242 *	490	2,000	50,000	92 U	U 88	89 U	110 U	100 U	140 U	110 🗓
Aroclor-1248 *	490	2,000	50,000	92 U	88 U	130 U	660	100 U	1100	330 🛱
Aroclor - 1254 *	490	2,000	50,000	92 U	86 U	89 U	170 U	100 U	350 U	220 🔱
Arocior - 1280-*	490-	2;000-	<del></del>	<del></del>	<del>, -, -, -, -</del> ,-88-U		170_U_	100 U	350 U	110 🗓
METALS (ug/kg)								<u>a</u>	4	4
Antimony	14	340	NC	2.2	3.9	2.1	3.0	4.6	5.3	4.2
Arsenic	20	20	NC	9.0	15.1	11.4	31.8	13.6	18.3	25.0
Beryllium	1	1	NC	0.40	0.25	0.34	0.33	0.30	0.23	0.23
Cadmium	1	100	NC	2.0	1.9	3 1.2 a	3.5	3.1	12 to 1 2.1 as	1.6
Chromium	NC	NC.	NC	42.8	57.5	20.7	51.3	56.0	46.4	53.2
Copper	600	600	NC.	154	121	86.6	135	207	120	138
Lead	400(4)	600	NC	476	581	202	582	777	391	491
Mercury	14	270	NC NC	2.7	1.2	0.49	1.1	1.9	1.4	1.6
Nickel	250	2400	NC	80.1	40.3	30.0	44.7	57.6	37.7	40.5
Selenium	63	3100	NC	1.1 U	1.1	1.1 U	1.8	1.3	1.8 U	2.0
Silver	110	4100	NC.	0.63	0.38	0.32 U	0.74	0.55	0.79	0.78
Thallium	2	2	NC	1.3 U	1.2 U	1.2 U	1.6 U	1.4 U	2.0 U	1.5 U
Zinc	1500	1500	NC	528	608	453	1490	1130	725	812
WET CHEM TESTS (mg/kg)										
Total Petroleum Hydrocarbons	10,000 ppm(5)	10,000 ppm	10,000 ppm	NA	NA	2000	2440	NA NA	NA.	NA .

### NOTES

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- " Values listed reflect the combined standards for "Total PCBs"



# TABLE 2 ANALYTICAL SUMMARY OF SOIL, RESIDUE, AND SLUDGE SAMPLES ARKANSAS CHEMICAL CO. NEWARK NEW JERSEY

			IAL AAVIII	NEW JEHS	<u> </u>				
Sample ID	New Jersey	New Jersey	New Jersey Impact	AK-37	AK-38	AK-39	AK-40	AK-41	AK-42
Lab Sample Number	Residential	Non-Residential	to Ground Water	56008	56009	56010	58011	56012	56013
Sampling Date	Soil Cleanup	Soll Cleanup	Soil Cleanup	07/18/96	07/18/98	07/18/96	07/18/96	07/18/96	07/18/98
Dilution Factor	_Criteria (ug/kg)_	_Criteria_(ug/kg)_	Criteria_(ug/kg)	10.0	20.0	10.0	10.0	5.0	5.0
Aroclor=1016*	490"	2,000	50;000	130-U	160-U	170 U	ILL Lion U_		110 U M
Aroclor - 1221 *	490	2,000	50,000	130 U	160 U	170 U	100 U	110 U	110 U 🏳
Aroclor-1232 *	490	2,000	50,000	130 U	160 U	170 U	100 U	110 U	110 U
Aroclor-1242 *	490	2,000	50,000	130 U	180 U	170 U	100 U	110 U	110 U
Aroclor-1248 *	490	2,000	50,000	1600	520	350 U	100 U	270 U	110 U
Aroclor – 1254 *	490	2,000	50,000	950 U	160 U	170 U	100 U	170 U	110 U
Aroclor-1260-*	490	2,000	50,000_	⊹130_U_	160 U	170_U_	100_U_	170 U_	110°U d
METALS (ug/kg)									Į.
Antimony	14	340	NC	6.0	6.2	7.9	6.2	23.0	2.7
Arsenic	20	20	NC	30.7	31.2	20.2	21,9	35.9	17.9
Beryllium	1	1	NC	0.30	0.40	0.51	0.25	0.42	0.63
Cadmium	1	100	NC	2.4	5.8	4.8	0.98	5.4	6.8
Chromium	NC	NC	NC	63.1	68.3	54.3	20.0	117	22.9
Copper	600	600	NC	83.2	97.9	133	179	611	199
Lead	400(4)	600	NC	640	573	734	435	1730	235
Mercury	14	270	NC	1.5	1.4	3.3	0.25	0.80	0.57
Nickel	250	2400	NC	30.9	37.6	62.8	27.3	116	21.8
Selenium	63	3100	NC	1.7 U	2.1 B	2.6	2.4	3.3	2.7
Silver	110	4100	NC	0.66 B	0.71 B	7.1	0.60 B	3.8	0.40
Thallium	2	2	NC	1.9 U	2.2 U	2.4 U	1.5 U	1.5 U	1.5 U
Zinc	1500	1500	NC	1960	1110	895	242	1300	672
WET CHEM TESTS (mg/kg)									
Total Petroleum Hydrocarbons	10,000 ppm(5)	10,000 ppm	10,000 ppm	6360	NA	NA	NA _	NA	NA _

# NOTES

mg/kg = milligrams per kilogram (parts per million - PPM)

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- \* Values listed reflect the combined standards for Total PCBs\*

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# TABLE 4a ANALYTICAL SUMMARY OF AQUEOUS SAMPLES - 11/08/95 ARKANSAS CHEMICAL CO. NEWARK, NEW JERSEY

	IALTA	ANN, NEW JO	"NOL I			
Sample ID		MW-1	MW-2	MW-3	TB110895	FB110895
Lab Sample Number		33964	33965	33966	33962	33963
Sampling Date		11/08/95	11/08/95	11/08/95	11/08/95	11/08/95
Dilution Factor	GQC	1.0	5.0	2.0	1.0	1.0
PP Pest/PCBs (ug/L)						
Aldrin	0.04	0.028 U	0.028 U	0.028 U	NR	0.028 U
alpha-BHC	0.02	0.061 U	0.061 U	0.061 U	NR NR	0.061 U
beta-BHC	0.2	0.074 U	0.074 U	0.074 U	NR	0.074 U
delta-BHC	NA.	0.060 U	0.060 U	0.060 U	NR	0.060 U
gamma-BHC (Lindane)	0.2	0.063 U	0.063 U	0.063 U	NR	0.063 U
Chlordane	0.5	0.32 U	0.32 U	0.32 U	NR	0.32 U
4,4'-DDD	0.1	0.073 U	0.073 U	0.073 U	NR	0.073 U
4,4'-DDE	0.1	0.064 U	0.064 U	0.064 U	NR	0.064 U
4,4'-DDT	0.1	0.071 U	0.071 U	0.071 U	NR	0.071 U
Dieldrin	0.03	0.064 U	0.064 U	0.064 U	NR	0.064 U
Endosulan I	0.4	0.055 U	0.055 U	0.055 U	NR	0.055 U
Endosulan II	0.4	0.068 U	0.068 U	0.068 U	NR	0.068 U
Endosulian Sulfate	0.4	0.061 U	0.061 U	0.061 U	NR	0.061 U
Endrin	2	0.073 U	0.073 U	0.073 U	NR	0.073 U
Endrin Aldehyde	NA	0.065 U	0.065 U	0.065 U	NR	0.065 U
Heptachlor	0.4	0.063 U	0.063 U	0.063 U	NR	0.063 U
Heptachlor epoxide	0.2	0.066 U	0.066 U	0.066 U	NR	0.066 U
Toxaphene	3	0.52 U	0.52 U	0.52 U	NR	0.52 U
PCB 1016-*	0.5	0.17 U	0.17_U	0.17_U	NR_	
PGB-1221-*	0.5	0.35-⊍	0:35-U	- 0:35ੁੁੁੁ <del>ੁ</del>	NR NR	—0:35-U—
PCB-1232-*	0.5	0:13:U=	==0:13:⊍=	0,13:U_	NR-	0.13 <sub>-</sub> U
RCB_1242-*	0.5		-0.38 U	_0:38 U	NR-	-0:38-U
PGB-1248 *	0:5	0:30 <u>U</u>	0.30.U	0.30_U	NR_	0.30
PCB-1254	0.5		0:35-U	0.35-U	NR-	0.35_U
PCB-1260-*	0.5	0-1-1-U	0.11 U	· 0.11_U	NR_	0.11 U



# TABLE 4b ANALYTICAL SUMMARY OF AQUEOUS SAMPLES - 02/07/96 ARKANSAS CHEMICAL CO. NEWARK, NEW JERSEY

	NEWARI	( NEW JERSE	T			
Sample ID		MW-1	MW-2	MW-3	FB020796	Trip_Blank
Lab Sample Number		40042	40041	40043	40039	40040
Sampling Date		02/07/96	02/07/96	02/07/96	02/07/96	02/07/96
Dilution Factor	GQC	1.0	20.0	2.0	1.0	1.0
PP Pest/PCBs (ug/L)						ļ
Aldrin	0.04	0.028 U	0.028 U	0.028 U	0.028 U	NR
alpha-BHC	0.02	0.061 U	0.061 U	0.061 U	0.062 U	NR
beta-BHC	0.2	0.074 U	0.074 U	0.074 U	0.076 U	NR
delta-BHC	NA	0.060 U	0.060 U	U 000.0	0.061 U	NR
gamma-BHC(Lindane)	0.2	0.063 U	0.063 U	0.063 U	0.064 U	NR
Chlordane	0.5	0.32 U	0.32 U	0.32 U	0.33 U	NR
4,4'-DDD	0.1	0.073 U	0.073 U	0.073 U	0.074 U	NR
4,4'-DDE	0.1	0.064 U	0.064 U	0.064 U	0.065 U	NR
4,4'-DDT	0.1	0.071 U	0.071 U	0.071 U	0.072 U	NR
Dieldrin	0.03	0.064 U	0.064 U	0.064 U	0.065 U	NR
Endosulfani	0.4	0.055 U	0.055 U	0.055 U	0.056 U	NR
Endosulanii	0.4	0.068 U	0.068 U	0.068 U	0.069 U	NR
Endosulfansulfate	0.4	0.061 U	0.061 U	0.061 U	0.062 U	NR
Endrin	2	0.073 U	0.073 U	0.073 U	0.074 U	NR
Endrinaldehyde	NA NA	0.065 U	0.065 U	0.065 U	0.066 U	NR
Heptachlor	0.4	0.063 U	0.063 U	0.063 U	0.064 U	NR
Heptachlorepoxide	0.2		0.066 U	0.066 U	0.067 U	NR
Toxaphene	3	0.52 U	0.52 U	0.52 U	0.53 U	NR
Aroclor-1016 *	0.5	0-17-⊍		0:17-しー	** B ** *	NR_
Aroclor=1221-*	<del> </del>			0:35-U	0.36 U	NR-
Aroclar=1232*	0.5				0.13°U	NR
Aroclor-1242*	0.5			0:38-U		NR-
Aroclor-1248*	0.5	to the first the first the second	0:30 U	0:30-U	0.31-U	NR
Aroclor-1254-*	0.5	0.35 Ú	0.35 U	0:35-U	A	NR_
Aroclor=1260*	0.5	0.11 U	0.11 U	0.11 U	- 0.11 U	NR.







# TABLE 5 ANALYTICAL SUMMARY OF CONTAINERIZED LIQUIDS ARKANSAS CHEMICAL CO. NEWARK, NEW JERSEY

Sample ID	AK-12	AK-22
Lab Sample Number	31398	31492
Sampling Date	10/03/95	10/04/95
Dilution Factor		1.0
VOLATILE COMPOUNDS (ug/kg)		
Chloromethane	NA NA	0.9 U
Bromomethane	NA NA	0.3 U
VinylChloride	NA NA	0.4 U
Chloroethane	NA NA	1.0 U
MethyleneChloride	NA NA	1.0 U
Trichlorofluoromethane	NA NA	0.2 U
1,1 - Dichloroethene	NA NA	0.6 U
1,1 - Dichloroethane	NA NA	0.3 บ
trans-1,2-Dichloroethene	NA NA	0.3 U
cls-1,2-Dichloroethene	NA.	1.0 U
Chloroform	NA NA	0.2 U
1,2-Dichloroethane	NA	0.2 U
1,1,1-Trichloroethane	NA NA	0.2 U
CarbonTetrachloride	NA.	0.2 U
Bromodichloromethane	NA NA	0.2 U
1,2-Dichloropropane	NA NA	0.5 U
cis-1,3-Dichloropropene *	NA NA	0.3 ∪
Trichloroethene	NA NA	0.4 U
Dibromochloromethane	NA NA	0.2 U
1,1,2-Trichloroethane	NA NA	0.4 U
Benzene	NA NA	0.2 U
trans-1,3-Dichloropropene*	NA NA	0.3 U
2-ChloroethylMnylEther	NA NA	.0.5 ∪
Bromoform	NA	0.3 U
Tetrachiomethene	NA NA	0.1 U
1,1,2,2-Tetrachioroethane	NA NA	0.3 U
Toluene	NA NA	0.2 U
Chlorobenzene	NA NA	0.1 U
Ethylbenzene	NA NA	0.2 U
Xylene(Total)	NA_	1.0 U

ALWANK, NEW JL	NOLI	
Sample ID	AK-12	AK-22
Lab Sample Number	31398	31492
Sampling Date	10/03/95	10/04/95
Dilution Factor		1.0
SEMIVOLATILE COMPOUNDS (ug/kg)		
N-Nitrosodimethylamine	NA	0.7 U
bis (2 - Chloroethy)) ether	NA	1.2 U
1,3 - Dichlorobenzene	NA	3.5 U
1,4-Dichlorobenzene	NA	3,6 U
1,2-Dichlorobenzene	NA	3,5 ∪
bis (2 - chloroisopropyl) ether	NA	1.4 U
N-Nitroso-di-n-propylamine	NA	1.5 U
Hexachloroethane	NA	2.5 U
Nitrobenzene	NA	1.5 U
Isophorone	NA	1.7 U
bis (2 - Chloroethoxy) methane	NA	1.7 U
1,2,4 - Trichlorobenzene	NA NA	3.8 U
Naphthalene	NA	2.6 U
Hexachlorobutadiene	NA	2.2 U
Hexachlorocyclopentadiene	NA NA	1.7 U
2-Chioronaphthaiene	NA NA	3.2 ∪
Dimethylphthalate	NA NA	1.3 U
Acenaphthylene	NA NA	2.1 U
2,6-Dinitrotoluene*	NA NA	1.5 U
Acenaphthene	NA NA	2.8 U
2,4-Dinitrotoluene*	NA.	1.5 U
Diethylphthalate	NA NA	1.2 U
4-Chiorophenyl-phenylether	NA NA	2.9 U
Fluorene	NA NA	2.0 U
N-Nitrosodiphenylamine	NA	1.1 U
4-Bromophenyl-phenylether	NA NA	2.0 U
Hexachlorobenzene	NA NA	1.3 U
Phenanthrene	NA NA	1.1 U
Anthracene	NA NA	1.1 U
Di-n-butylphthalate	NA NA	1.0 U
Fluoranthene	NA NA	1.1 U
Pyrene	NA	0.6 U
Benzidine	NA	0.5 U
Butylbenzylphthalate	NA NA	( 0.7 U
3,3'-Dichlorobenzidine	NA	1.5 U
Benzo(a)anthracene	NA	0.9 U
Chrysene	NA NA	0.9 U

Sample ID	AK-12	AK-22
Lab Sample Number	31398	31492
Sampling Date	10/03/95	10/04/95
Dilution Factor		1.0
bis (2 - Ethylhexyl)phthalate	NA	2.6
Di-n-octylphthalate	NA	1.0 U
Berzo(b)fluoranthene	NA.	0.8 U
Benzo(k)fluoranthene	NA	0.9 U
Berzo(a)pyrene	NA	0.8 U
Indeno(1,2,3-cd)pyrene	NA.	0.7 Ū
Dibenz(a,h)anthracene	NA	0.9 U
Benzo(g,h,i)perylene	NA	0.8 U
SEMINOLATILE COMPOUNDS (GC) (ug/kg)		
DRO	519000	. NA
PCBs (ug/kg)	1	e
PCB 1016 *	2000 U	71 U
PCB 1221 *	2000 U	71 0
PCB 1232 *	2000 U	71 0
PCB 1242 *	2000 U	71 U
PCB 1248 *	2000 U	320
,PCB 1254 *	2000 U	300 U
PCB 1260 *	2000 U	260_
METALS-(mg/kg)		9
Antimony	NA NA	261
Arsenic	NA NA	5.1
Beryllium	NA NA	0.30 U
Cadmium	NA NA	1.1
Chromium	NA NA	33400
Copper	NA NA	1350
Lead	NA NA	5770
Mercury	NA NA	2.0
Nickel	NA	609
Seienlum	NA.	2.4 U
Silver	NA NA	0.80 U
Thelilum	NA NA	4.4 U
Zine	NA_	4870

NOTES

mg/kg = milibrams per kilogram (parts per million – PPM) ug/kg = micrograms per kilogram (parts per billion – PPB)

J = Indicates an estimated value below the Method Detection Limit

U = Undetected NA = Not Analyzed

\* Values listed reflect the combined standards for "Total PCBs"

Lucent – Western Electric – AT&T

# Western Electric Company Incorporated\*

100 Central Avenue

Kearny Town

**Hudson County** 

CATEGORY: ECRA

TYPE OF FACILITY: Manufacturing-Electro Mechanical

OPERATION STATUS: Ceased

PROPERTY SIZE: 147 Acres

SURROUNDING LAND USE: Industrial

MEDIA AFFECTED

**CONTAMINANTS** 

STATUS

**Ground Water** 

Polychlorinated-Biphenyls-(PCBs)

Treating\_9

Volatile Organic Compounds

Soil

Polychlorinated Biphenyls (PCBs)

Removed

Metals

Petroleum Hydrocarbons

Volatile Organic Compounds

Further Delineation Required

Structures

Petroleum Hydrocarbons

Investigating

Metals

Base Neutral Extractable Compounds

FUNDING SOURCE(S): Responsible Party

ACP DATE: 07/08/85

FINANCIAL ASSURANCE: \$0.60M Posted

# SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

The Kearny Works location of Western Electric Company Incorporated (a.k.a. AT&T Technologies Incorporated) consists of 36 buildings on the South Kearny peninsula. The location was used for the assembly of electromechanical devices. The site is being cleaned up under New Jersey's Environmental Cleanup Responsibility Act (ECRA) Program due to the cessation of operations and sale of the property. Under the Approved Cleanup Plan (ACP), 23,000 cubic yards of contaminated soil was excavated and the building interiors cleaned. The ground water is being treated on-site and then discharged to the local sewage authority. The ground water remediation has been ongoing since November 1987. Additional delineation of volatile organic compound contaminated soil has been required, along with sampling of residual material on pipes and walls of building 85.

FOR FURTHER INFORMATION CONTACT: Site Remediation Program

Bureau of Environmental Evaluation and Cleanup

Responsibility Assessment

609-633-7141

PROJECT NAME

RI/FS

DESIGN

**CONSTR** 

Approved Cleanup Plan

Planned

**Jnderway** 

completed or Not Required

# LOWENSTEIN, SANDLER, KOHL, FISHER & BOYLAN

KENNETH J. SLUTSKY DAVID L HARRIS ZULIMA V FARBER WILLIAM P. MUNDAY DANIEL J BARKIN GEORGE J. MAZIN JAMES STEWART ROBERT D CHESLER

JOHN L BERGER DAVID W FIELD MARTHA L LESTER LINDA PICKERING JOHN D HOGOBOOM TERRY E. THORNTON ROBERT G MINION JEFFREY J WILD LAWRENCE M ROLNICK GARY M WINGENS DIANE P SULLIVAN

SAMUEL B. SANTO, JR. ROSEMARY E. RAMSAY

JEFFREY B. GRACER

A PROFESSIONAL CORPORATION

COUNSELLORS AT LAW 65 LIVINGSTON AVENUE ROSELAND, NEW JERSEY

07068-1791

TELEPHONE (201) 992-8700

'FACSIMILE (201) 992-5820

SOMERVILLE OFFICE

TELEPHONE (908) 526-3300

FACSIMILE (908) 526-9173

February 14, 1997

FRANCES M. O'CONNOR\*
KARIM G. KASPAR
ROBERT M. LAPINSKY
HENRY M. PRICE
DAVID A. THOMAS
MICHAEL N. GOOEN
JERI L. ABRAMS
RICHARD C. SZUCH
STEPHEN R. BUCKINGHAM
VIRGINIA A LAZALA
GEOFFREY A. PRICE
PETER L. SKOLNIK
NESLIHAN S. MONTAG
ALEX MOREAU ALEX MOREAU
MILLIAM J VONDERHEIDE
THOMAS E MESEVAGE
JOYCE A. DAVIS
MICHAEL DAVID LICHTENSTEIN
BRIAN WEEKS
EDWARD M. ZIMMERMAN
AMY C. GROSSMAN EDWARD M. ZIMMERMAN
AMY C GROSSMAN
MAUREEN E. MONTAGUE
GAVIN J. ROONEY
CHRISTOPHER L. WEISS
CHARISSE A CARNEY
DANIEL C. BRAUN
EDWARD T. DARTLEY
TINA MARIE NIEHOLD
SHERYL BERNSTEIN CILENTI
DAVID J. BIANCHI
LAUREN M. HOLLENDER
PATRICK J. WHALEN
COURTNEY A. SCHAEL
DONALD G. HARRINGTON
MAUREEN A. RUANE
FRANK D. STEFANELLI

DANA SADE GAIL HOWIE CONENELLO JONATHAN A. WASSERMAN R SCOTT THOMPSON H SCOTT THOMPSON LYNN L ABRAHAM CATHERINE E. BOSTOCK THOMAS P COLE MICHAEL E. GROSSMAN JAVIER E. ROBLES MELISSA A RULE ANDREA B. SCHWARTZ DAVID M. WISSERT TIMOTHY G HANSEN MARY R D'AGOSTINO STEVEN ERIC SIESSER MICHAEL C PETRONIO THOMAS J PYLE, JR ANDREA L. WOLFF NANCY CHUNG CHRISTINE OSVALD-MRUZ ADWOA AYO SANDERSON THOMAS E. REDBURN. JR MARINA SVETLOV ROBERT L. LOMBARDI MICHELE C MEYER-SHIPP SUSAN J. SCHLECK NEIL P. HORNE JACQUELINE C. ROMERO ERIC DAVID WEINSTOCK ELI S. GOLDBERG

PA BAR ONLY

### OF COUNSEL

ROBERT L. KRAKOWER NORMAN W SPINDEL STUART S. YUSEM

ARD M SANDLER
BENEDICT M KOHL
ARNOLD FISHER
JOSEPH LEVOW STEINBERG

MATTHEW P BOYLAN
BRUCE D SHOULSON
JOHN R MACKAY 2ND
MARTIN R GOODMAN
JOHN D SCHUPPER
STEPHEN N DERMER

STEPHEN N DERMER
MICHAEL L RODBURG
ALLEN B LEVITHAN
R BARRY STIGER
GREGORY B REILLY
PETER H EHRENBERG
STEVEN B FUERST
THEODORE V. WELLS. JR
WILLIAM S KATCHEN
MICHAEL DORE
JOHN L KRAFT
ASHLEY STEINHART
DOUGLAS S EAKELEY
RICHARD D WILKINSON
ALAN WOVSANIKER

HARVEY SMITH DAVID E. ALPERT

# VIA FIRST CLASS MAIL

Mr. Pat Evangelista Emergency & Remedial Response Division **USEPA** 290 Broadway, 19th Floor New York. New York 10007-1866

Re:

River Terminal Development Company, South Kearny Request for Information Under 42 USC §9601 et seq. Diamond Alkali Superfund Site, Passaic River Study Area

Dear Mr. Evangelista:

Enclosed please find River Terminal Development Company's Response to the USEPA's Request for Information dated December 24, 1996. Pursuant to agreement with the Agency, this response is being mailed on February 14, 1997. In addition, Exhibit G has not been included in this Response but will be forwarded to the Agency shortly.

As requested by the USEPA in its letter of December 24, 1996, a copy of this Response is also being forwarded to Ms. Amelia Wagner, Assistant Regional Counsel.

ABA000078

•		FOR DEP USE ONLY
AT I - Genera	il Information (continued)	1 1 1 1 1 1 1
	selected substances included in this report stone with their CAS Numbers (From	
Table I of the	instructions) which are manufactured, processes, termos, resecuseed, released.	
# Bornel	1 ium 7440_41_7, Chromium 7440_47_3.	
Coppe	r 7440-50-8. Cyaride 57-12-5.	
10000	icohyde 50-00-0, Lead 7439-92-1,	
methy.	lene Chloride 75-09-2, Nickel 7440-02-10	
'Silve	r 7440-22-4	<del>                                      </del>
	chloroethylene 127-15-4	
Tolue	ne 108-88-3	
111 T	richloroethane 71-55-6	
Trich'	loroethylene 79-01-6	<del>                                      </del>
- 11 14.1	10: 0etv1c.ic   3-01-0	
Zinc :	7440-66-E	
Tablemater Old	scharges - Complete the following information:	
L Discharge	to bublicity owned treatment werks (POTW):	1
1. 345.000 70	Juling (Porm Kearny Municipal Sawage Plant	\
	Central Avenue, Kearny, N.J.	
Z Sum	ted Average Volume of Mastewater Discharges to POTW in a day	1 1 1 1 1 1 1
	None Required	
3. Briefly	describe any pretestment methods 100116 1160111111111111111111111111111	
4. RESIDE	rezer consists of: ( X Process Water, ( ) Contact Cooling, (X) Non-Contact	
	, (X) Consistic Sowage. ( ) Contaminated Storm Mater, ( ) Maandown Mater.	
	nuocor Water, ( ) Cther;	
8. Discharge	10 Mevigable Materway of Tributary Street:  # Receiving Street PASSAIC Piver	
	N T 0000//0	
2. NPOES	Permit Nurser 11 a.U. UUZU443	1 1 1 1 1
1. Estimat	ted average volume of witatewater diacratrysis to receiving stream in a day	
	250,000 gallona.	<del>                                     </del>
4. Briefly	Cyanide is destroyed.	
Chrome		1 1 1 1 1 1 1
Metals	S DIFECTION CALLED .  ALLEY EXPRESSION OF THE CONTROL OF THE CONTR	
Cooling	), ( ) Consistic Savege, ( ) Contaminates Storm Heter, ( ) Washdown Histor,	
	rusber Weler, ( ) Other:	
	ous) gractices (1930—1977). Has this plant previously disposes of wastes containing any land disposal site (f.s. by land spreading or burist, landfilling, lageon or seeps	
off 3:197		
	AET 💢 🗝 🗀	
if available of	ovide the following information for each disposal sits. Use additional pages if sec	<b>06387</b> .
Name and Loc	Information is not available.	
Time period at	10 463 (860	
		int of serviced substance used at 11th (pounds)
disposed of al	this site	mee at the (bother)
*Note:	Asbestos enters premises in form of bra	re-shoeucoa-
; <del>~</del> ~ .	stituents. RCB sare in fixed transform	
	Small-stock. Neither enters in co-production	Cit 108-200-116
	rescreed in Part ARAN	00205
	NDAO	00203

# 7. Storage Facilities

- A. RCRA Permit or "Interim Status" Kearny has filed for "Interim Status" as a storage facility.
- B. Storage Area The storage area, (Pad) 135' x 85' is open to the weather and fenced in with an 8' chain link fence. The area is diked with a concrete curb which varies from 6" to 18" depending upon the ground slope. The area has a large warning sign on the fence identifying the enclosure as a storage area. There are no fire extinguisners as yet in the storage area but they have been ordered. The storage area is 75 feet from the plant security police and fire control stations.
- C. Spill Collection System Their spill control plan consists of covering potential spills with "speedi-dri" and calling their scavenger in for clean up.
- D. Drainage The storage area has a large drainage pit in the approximate center. The pit is equipped with a manual valve and the drain leads to the river. The storage area can be drained within four hours after a heavy rain with this system. RCRA requires that drums stand in rainwater no more than one hour after a rain. Kearny has the drums stored on pallets and therefore meets this one hour requirement.
- E. Closure Plan Copy attached

In conclusion, we feel that the Kearny Works satisfactorily meets the RCRA requirements for a generator and storer of hazardous waste. We also feel there is weakness in several areas as follows:

- 1. The collection system for spills could allow hazardous waste into the storm drain.
- 2. The storage area should really be roofed over to keep rainwater etc. off the drums and out of the area.
- 3. The drain systemend valve could be a problem in freezing weather.
- 4. Asphalt pad is racked and should be impervious.

# PCB Inspection

Kearny has 13 PCB transfirers on site using "pyranol" and "abestol" as the dielectric fluid. Continued the transformers, seven are inside installations and the remaining six are putside, two of which are not functioning and considered storage tanks. They also have a drum storage area inside with a total of twelve 30 gallor drums containing virgin PCB liquid used for transformer make-up.



We reviewed their annual PCB summary record and the transformer inspection record under the "Interim Measures Program". These records were satisfactory and up to date. Following this, we reviewed the PCB marking and storage requirements and looked at all transformers and the drum storage area. During this review, we found several items in these areas which were not in compliance with the PCB final rule (40 CFR Part 761).

These non compliance areas are as follows:

No label on the east unit transformer at the waste treatment plant.

The (2) transformers in outside storage at building 170 south are not diked.

The (2) transformers in outside storage at building 170 south do not have "adequate roof and walls to prevent rain water from reaching the stored PCB items."

The storage area in the basement of Building 32 is below the 100 year flood level.

The storage area is not adequately marked with mark "ML" which is the specified label. However, the area is identified as a PCB storage area with a non standard label.

The storage area is not diked.

The stored drums have no labels.

The non compliance items were reviewed with Bruce Rapp who informed his supervisor Mr. Chikowski. I was assured that these items would be corrected as soon as possible.

A. H. STAHELI Senior Engineer

Atts.

rb

December 8, 1981

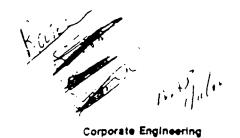
MEMORANDUM FOR RECORD

Re: [Kearny Works! PCB Storage Area

On December 4, 1981, I visited the Kearny Works in order to confirm that corrective action was taken to place the Works' PCB storage area in compliance with 40CFR761. The new storage area which is located on the fifth floor of Building #25 is correctly labelled, has secondary containment (dikes) for all PCBs and PCB items, and satisfactorily complies with the PCB Ban Regulations for an Annex III storage facility.

T. A. Hunter

:mf





# Western Electric

222 Broadway New York, N.Y. 10038 212 571-2345

JAN 5 1982

Re: Company instruction 76.232, Rollychlorinated Biphenyls 9

The Broadway Publication Center at 222 Broadway will distribute copies of this C.I. through normal channels. For your immediate use, we are enclosing an advance copy of this instruction.

If you have any questions, please contact Art Staheli on 8-222-3768.

J. G. AMBERS
Department Chief
Environmental Control
Engineering

Enc.

Letter to: See Attached List

ABA000289

932500204

- F. M. Goll T. Trent M. A. Bronzert R. Shipekg C. W. Sernard R. J. Speights J. B. Doerr E. J. Sourgiesz E. C. Thorne L. R. Albrecht R. H. Phillips R. Y. Hays J. T. Chikowski A. J. Murabito G. R. Best A. C. Lyman T. E. Hill E. F. Setmeyer C. M. Carolina R. A. Veach C. C. Van Etten E. P. Hjorth J. A. Yeel R. A. Robertson J. P. Carpenter J. A. ⊣udak F. V. McGeenan E. B. Mitchell G. E. Harris R. M. Dollard J. Locke F. J. Grande
- 3. Schlipf Copy to: H. S. Moss J. R. Durante G. M. Rancich J. B. Bonner L. J. Kaitz R. C. Allen

P. Wyszkowski

- Allentown - Atlanta - Baltimore - Burlington Shops - Columbus - Denver - Guilford Center - Indianapolis - kansas City - Kearny - Merrimack Vailey - Montgomery - New River Valley - North Carolina - Lisle, Ill. - Oklahoma City - Omaha - Phoenix - PPE, Springfield - Reading - Richmond - Rolling Meadows - Installation - Shreveport - Southwestern Region -- Southern Region - Pacific Region - Northeastern Region - Mtn. Northwest Region - Eastern Region - Central Region
  - Yassau Recycle, Gaston " , Staten Island - Teletype, Skokie - ", Little Rock - 222 Broadway - AT&T, Basking Ridge - BTL, Murray Hill

CI 76.232 December 15, 1981 New Instruction

# POLYCHLORINATED BIPHENYLS (PCB'S) MANUFACTURING, PROCESSING DISTRIBUTION AND USE PROHIBITIONS

# CONTENTS

- 1. General
- 2. Definitions
- 3. Disposal Requirements For PCB's
- 4. Storage Of PCB's For Disposal
- 5. Decontamination
- 6. Marking
- 7. Monitoring & Recordkeeping

- 8. Transformers
- 9. Interim Measure Program For PCB Transformers
- 10. Hydraulic Systems
- 11. Spills
- 12. Penalties For Failing To Comply Appendix A PCB Inspection Manual

# 1. GENERAL

- 1.1 The purpose of this instruction is to define the requirements of the PCB manufacturing, processing and distribution rule (40 CFR Part 761) which became effective on July 1, 1979.
- 1.2 This rule which was promulgated under the Toxic Substances Control Act (TSCA), is designed to protect the environment from further contamination by PCB's due to their improper handling, use and disposal.
- 1.3 The rule allows the continued use of PCB's in totally enclosed systems such as transformers and capacitors. A slow phasing out, such as allowed by this regulation is felt by the Environmental Protection Agency (EPA) to be the best way to control further contamination of the environment. Specifically the main points of this rule are:
- 1.31 It prohibits all manufacturing of PCB's after July 2, 1979 unless exempted by EPA.
- 1.32 It prohibits the processing, distribution in commerce and use of PCB's except in a totally enclosed manner after July 2, 1979 unless specifically exempted by EPA.
- 1.33 It authorizes certain processing, distribution in commerce and use of PCB's in a non-totally enclosed manner (which would otherwise be subject to par. 1.32 above).

- 1.4 PCB's are potentially harmful because once released into the environment they do not biodegrade. In addition, PCB's tend to accumulate in the tissues of living organisms. This means as PCB's move up in the food chain towards man their concentrations increase. Test results have shown that PCB's cause reproductive failures, gastric disorders, skin lesions and tumors in laboratory animals.
- 1.5 This rule, 40 CRF Part 761, supercedes the "Disposal and Marking" regulation of February 17, 1978 and the August 2, 1978 Technical Amendments.
- 1.6 This instruction is to be used as a guide when preparing local instructions related to the disposal of hazardous wastes. Locations should modify this instruction to incorporate state or local requirements and assign functional responsibilities where necessary.
  - 1.7 Related Instructions
    - CI 77.305 Dept. of Transportation Regulations For Hazardous Materials and Wastes
    - CI 76.231 Management of Hazardous Wastes
    - CI 15.500 Hazardous Materials Data Bank Procedures

# 2. DEFINITIONS

- 2.01 PCB A chemical substance limited to the biphenyl molecule which has been chlorinated to varying degrees.
- 2.02 PCB Container Any can, barrel or drum that contains and whose surfaces are in direct contact with PCB's.
- 2.03 PCB Article A manufactured article, not a container, whose surfaces are in direct contact with PCB's. Transformers, capacitors are examples.
- 2.04 PCB Article Container Any can, barrel or drum used to contain PCB articles whose surfaces are not in contact with PCB's.
- 2.05 PCB Equipment Any manufactured item which contains a PCB article. Frames, cabinets containing PCB capacitors are examples of this.
- 2.06 PCB Item Any PCB article, PCB article container, PCB equipment or PCB container.
- 2.07 PCB Transformer Any transformer that contains 500 or more PPM of PCB's.

- 2.08 PCB Contaminated Transformer Any transformer that contains 50 PPM or more but less than 500 PPM of PCB's.
- 2.09 Annex I Incinerator An EPA approved incinerator for PCB destruction per Section 761.40(a).
- 2.10 Annex II Landfill An EPA approved chemical waste landfill for PCB's per Section 761.40(b).
- 2.11 Annex III Storage Facility An EPA approved PCB storage area for PCB's per Section 761.42.
- 2.12 Large High Voltage Capacitor One that operates at 2,000 Volts A.C. or above and contains 3 lbs. or more of PC3's.
- 2.13 Large Low Voltage Capacitor One that operates at less than 2,000 Volts A.C. and contains 3 lbs. or more of PCB's.
- 3. DISPOSAL REQUIREMENTS FOR PCB'S
- 3.1 Following are the types of PCB's and PCB items and their specified disposal methods:

# Type of PCB and/or PCB Items

# Disposal Method

- 3.101 Liquid PCB Mixtures (over 500 PPM)
- 3.102 Liquid PCB Mixtures

3.103 Liquid PCB Mixtures

3.104 PCB Containers

(over 500 PPM PCB's)

(50-500 PPM)

(under 50 PPM)

- Incinerate in an Annex I Incinerator.
- Incinerate in an Annex I Incinerator.

Or

- Incinerate in a high efficiency Soiler (per 761.10).

0E -

- Landfill in an Annex II landfill.
  - Municipal Trash: except this material may not be used for dust control or road oiling.
  - Container and contents incinerated in an Annex I Incinerator.

Or

ABA000293

# Type of PCB and/or PCB Item

# Disposal Method

- Drained Container disposed of in an Annex II landfill and liquid incinerated in an Annex I Incinerator.

3.105 PCB Container (50-500 PPM PCB's)

- Drained container disposed of in municipal trash, liquids per paragraph 3.102 above.
- 3.106 PCB Transformers (over 500 PPM)
- Transformer disposed of in an Annex II landfill after first draining PCB's, filling with solvent and letting stand 18 hours and draining again. Then, dispose of PCB's and solvent in an Annex I Incinerator.
- 3.107 PCB Contaminated Transformer Drain transformer and dispose of (50-500 PPM)

  PCB contaminated liquid as per
  - Drain transformer and dispose of PCB contaminated liquid as per paragraph 3.102 above. No TSCA regulations on disposal of drained transformer.
- 3.108 PCB Small Capacitors (under 3 lbs.)
- Municipal Solid Waste. Where there are accumulations of small capacitors in excess of 200, then disposal should be in an Annex II landfill.
- 3.109 PCB Large Capacitors (over 3 lbs.)
- Incineration in am Annex I Incinerator.
- 3.110 Fluorescent Light Ballasts
- Municipal Solid Waste.
- 3.111 Non Liquid PCB's (Contaminated Soil, Rags, etc.)
- Disposal in an Annex II landfill.

Or

- Incineration in an Annex I Incinerator.
- 3.2 Locations of the eight (8) Annex II Landfills

	EPA Region	Site Location	Company	
3.21	II	New York	Cecos International P.O. Box 619 Niagara Falls, N.Y. (716) 731-3281	14302

	EPA Regio	n Site Location	Company
3.2	22 II	New York	SCA Chemical Service Inc. 1550 Balmar Road Model City, N.Y. 14107 (716) 754-8231
3.2	23 IV	Alabama	Waste Management of Alabama P.O. Box 55 Route 17 Mile Post 163 Emelle, Alabama 35470 (800) 241-7829
3.2	24 ♥	Ohio	Cecos International 50982 Aber Road Williamsburg, Ohio 45176 (513) 724-6114
3.2	25 X	Id a ho	ENVIRO Safe Services of Idaho Inc. : P.O. Box 936 Mountain Home, Idaho 83301 (208) 834-2275
3.2	26 IX	Nev ad a	U.S. Ecology Inc. 9200 Shelbyville Road P.O. Box 7246 Louisville, Kentucky 40207 (502) 426-7160
3.2	27 X	Oregon	Chem-Security Systems Inc. P.O. Box 1269 Portland, Oregon 97207 (503) 223-1912
3.2	28 IX	California	Casmalia Disposal 539 Ysidro Road P.O. Box 5275 (805) 969-5897

# 3.3 Location of the two (2) EPA approved Annex I Incinerators:

	EPA Region	Site Location	Company
3.31	VI	Arkansas	Ensco Inc. American Oil Road Eldorado, Arkansas (501) 863-7178

CI 76.232 December 15, 1981

EPA Region Site Location Company

3.22 VI Texas Rollins Environmental Services
P.O. Box 609
Deer Park, Texas 77536
(713) 479-6001

# 4. STORAGE OF PCB'S FOR DISPOSAL

- 4.01 Any PCB article or PCB container stored for disposal <u>before</u> January 1, 1983 shall be disposed of before January 1, 1984.
- 4.02 Any PCB article or PCB container stored for disposal after January 1, 1983 shall be disposed of within 1 year of the initial storage date.
- 4.03 Storage facilities for PCB articles and PCB containers shall be provided with the following:
- 4.031 Adequate roof and walls to prevent rainwater from reaching the stored PCB's.
- 4.032 Smooth Portland cement or steel floor, free of drains, expansion joints, cracks, gaps or other openings.
- 4.033 Continuous curbing at least 6" high with containment volume of twice the largest stored container or 25% of the total stored items whichever is greater.
  - 4.034 A location above the 100 year flood water elevation.
- 4.04 The following PCB items may be stored temporarily in an area which does not comply with paragraph 4.03 above for up to thirty (30) days from the date of removal from service, provided that date is marked on the container.
  - 4.041 Non-leaking PCB articles and equipment
- 4.042 Leaking PCB articles and PCB equipment which are placed in a PCB container with sufficient sorbent materials to contain the remaining PCB's in the leaking PCB items.
- 4.043 PCB containers containing non-liquid PCB's such as contaminated rags and soil.

- 4.044 PCB containers containing liquid PCB's in the 50-500 PPM range providing a spill prevention plan has been prepared for the temporary storage area in accordance with 40 CFR 112. Container must carry the notation that concentration does not exceed 500 PPM.
- 4.05 Non-leaking large high voltage capacitors and PCB contaminated transformers may be stored adjacent to a PCB storage facility on pallets until January 1, 1983.
- 4.06 Any item of movable equipment used to handle PCB's and which has been in direct contact with PCB's shall not be removed from the storage area without first being properly decontaminated.
- 4.07 All PCB articles and PCB containers in storage shall be checked every 30 days. Any leaking articles or containers shall be transferred to non-leaking containers, and contaminated residues from cleanup should be disposed of in accordance with paragraph 3.111.
- 4.08 The container specification defines five types of metal containers adequate for storing PCB's. These containers range in size from one gallon containers to railroad tank cars. Except as provided in paragraph 4.09 below, any container used for the storage of liquid PCB's shall comply with the DOT specification 49 CFR 178.80 (Spec 5), 178.82 (Spec 5B), 178.102 (Spec 6D or 178.116 (Spec 17E). Containers used for non-liquid PCB storage shall comply with 178.80 (Spec 5 Container), 178.82 (Spec 5B Container) or 178.115 (Spec 17C Container).
- 4.09 Storage containers for liquid can be larger than the containers specified in paragraph 4.08 above, provided they are designed and constructed in compliance with OSHA standard 29 CFR 1910.106.
- 4.10 When storing PCB's for disposal, separate facilities need not always be constructed, all that is required to meet the <u>intent of the regulation</u> is the following:
- 4.101 A small area inside a building serves the purpose of "adequate roof and walls."
- 4.102 A smooth floor free of drains, cracks or openings serves the purpose of poured "Portland Cement Floor." This area should then be diked as required.
  - 4.103 A metal pan with raised edges serves as a "dike."
- 4.104 A large drum or several drums could serve as a "diked area" if the stored PCB's and PCB items are placed in small containers inside the larger drums.

# 5. DECONTAMINATION

- 5.1 A PCB container to be decontaminated shall have the internal surfaces rinsed three times with a solvent containing less than 50 PPM of PCB's. Each rinse shall use a volume of solvent equal to 10% of the containers capacity. The solvent can be reused until it exceeds 50 PPM of PCB's, at which point it shall be disposed of by incineration in an Annex I Incinerator.
- 5.2 Movable equipment used in storage areas shall be decontaminated by swabbing with a solvent described in paragraph 5.1 above.

# 6. MARKING

6.1 The following formats shall be used for PCB marking requirements:

# CAUTION CONTAINS PCBS (Polychlarinated Biphenyls) A roxic environmental contaminant requiring special handling and disposal in accordance with U.S. Environmental Protection Agency Regulations 40 CFR 761—For Disposal Information contact the nearest U.S. E.P.A. Office. In case of accident or spill, call tall free the U.S. Coast Guard National Response Center: 800:424-8802 Also Contact—Tel. No.

# CAUTION CONTAINS PCBS INNICED BRANCH FOR PROPER DISPOSAL INFORMATION CONTACT U.S. ENVIRONMENTAL PROTECTION AGENCY

FIGURE 2

# FIGURE 1

6.2 When marking large FCB articles, containers or equipment, the large mark (Fig. 1) shall be used. The size shall be square, at least 6" on each side down to a minimum of 2" on a side for smaller size equipment.

ABA000298

9.

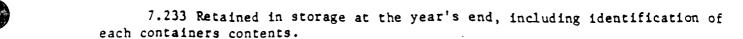
- 6.3 When marking smaller PCB articles and equipment, the smaller mark (Fig. 2) shall be used. The size shall be a rectangle 1" x 2". If the item to be marked is very small then the mark can be reduced to a minimum of .4" x .8".
  - 6.4 Ordering Information
    - 6.41 Labels may be purchased from:

Label Master
7525 N. Wolcott Avenue
Chicago, Illinois 60626
Phone: (312) 973-5100 or locally

- 6.5 The following PCB containing items shall be marked with one of the labels shown in Figures 1 and 2.
- 6.501 All PCB transformers (marking of PCB contaminated transformers is not required).
  - 6.502 All large high voltage PCB capacitors.
- 6.503 Where structures such as poles, fences, etc. are supporting and protecting large high voltage PCB capacitors then, these structures shall be marked instead, and a record of the capacitors inside the structure shall be maintained at the location.
- 6.504 All transport vehicles with 99 lbs. of liquid PCB's or with one or more PCB transformers.
  - 6.505 Electric motors with PCB coolant.
  - 6.506 Hydraulic machinery using PCB hydraulic fluid.
  - 6.507 PCB containers.
  - 6.508 PCB articles and equipment.
  - 6.509 Storage areas for PCB's.
- 6.510 Large low voltage capacitors shall be marked at the time of removal from use.



- 7.1 Beginning July 2, 1978, each location containing 99 lbs. of PCB chemical substances and mixtures or one or more PCB transformers or 50 large PCB capacitors shall develop and maintain records on the disposition of the PCB's. A document shall be prepared by July 1 of each year, covering the previous calendar year. These records shall be maintained for five years after PCB's are no longer used at the facility. The records shall be kept in accordance with the following:
- 7.11 The dates when PCB's are removed from service, are placed into storage for disposal, are placed into transport for disposal. Quantities shall be reported as follows:
- 7.111 Total weight in kilograms of PCB's and PCB items in containers with the identification of each containers contents.
- 7.112 Total number of PCB transformers and the total weight in kilograms of the PCB's contained in them.
  - 7.113 Total number of PCB large high or low voltage capacitors.
- 7.12 For PCB's and PCB items removed from service, the location of the storage or disposal facility they went to including the name of the owner or operator.
- 7.13 Total quantities of PCB's and PCB items remaining in service at the end of the calendar year using the quantity shown in paragraphs 7.111 to 7.113 above.
- 7.2 Where a location has a storage facility (diked area for PCB storage) on site, a separate record for the facility shall be kept, showing the following:
  - 7.21 The date when PCB's and PCB items were received for storage.
- 7.22 The date when PCB's and PCB items were removed from storage and either transferred to another storage area or disposed of, including identification of the disposal facility.
- 7.23 A summary of the total kilograms of PCB's and PCB articles in containers and the total kilograms of PCB's in transformers that were:
  - 7.231 Received during the year.
  - 7.232 Transferred or disposed of during the year.



7.3 When PCB's are no longer stored on site, the EPA Regional Administrator for the Region your plant is located in must be notified within 60 days of your closing the storage facility. In addition, the records described herein must be kept on site for five (5) years after the storage facility is closed.

11.

#### 8. TRANSFORMERS

- 8.1 There are three (3) categories of transformers and as such are subject to different storage disposal and rebuilding requirements. These categories are:
- 8.11 Non-PCB transformers (less than 50 PPM). There are no servicing or rebuilding restrictions. The only disposal restriction, is that if the fluid has any detectable PCB's it cannot be used as a sealant or dust control agent on roads. No transformer may be classified as a non-PCB transformer, unless its fluid has been tested and found to contain less than 50 PPM. Certification must be provided.
- 8.12 PCB contaminated transformers (50-500 PPM). The only restriction on servicing or rebuilding is that it be done by the transformer owner, operator or a person with an exemption to the ban regulations. Disposal restrictions are that the PCB contaminated fluid must be disposed of in an Annex I Incinerator or in an Annex II landfill or high efficiency boiler. There are no restrictions on disposal or recycling of the transformer casing or coil.
- 8.13 PCB transformer (above 500 PPM). PCB transformers cannot be rebuilt. If the defect requires removal of the coil from the casing, then the transformer must be replaced by a non-PCB type. Leaks and other minor repairs, not requiring removal of the coil may be performed. PCB fluid can only be disposed of in an Annex I Incinerator. After rinsing with solvent, the transformer can be disposed of in an Annex II landfill.
- 8.2 To convert from a PCB contaminated transformer to a non-PCB transformer or from a PCB transformer to a PCB contaminated transformer, it must be drained and refilled with a non-PCB dielectric. After 3 months operation, it must be tested before being reclassified. After reclassification, it may be rebuilt.
- 8.3 A transformer must be classified as a PCB transformer if any of the following exist:
  - 8.31 A nameplate indicates the transformer contains PCB dielectric fluid.

- 8.32 The dielectric was tested and found to contain 500 PPM or more of PCB's.
  - 8.33 The transformer has no nameplate or any other identification.
- 8.34 The owner has other reasons to believe the unit contains 500 PPM or more of PCB's.
- 8.4 A mineral oil transformer can never be assumed to be a non-PCB transformer unless its dielectric fluid has been tested by the owner, or certified by the manufacturer to contain less than 50 PPM PCB's. According to the EPA, each location as owner or operator has the option, at the time of disposal, of disposing of an untested mineral oil transformer as a PCB contaminated unit or testing it and disposing of it (if below 50 PPM) as a non-PCB unit. In actuality, most disposal facilities require that testing be done on any transformer fluid and that a copy of the laboratory results be furnished before the fluid will be accepted for disposal.
- 8.5 Sale or transfer of PCB transformers. A PCB transformer may be sold or transferred if it is not leaking and if it was acquired prior to July 1, 1979.
- 8.6 A PCB transformer which is not in service and is awaiting disposal, is considered a storage tank and must be put either into temporary storage (per par. 4.04) if disposal will be within 30 days, or into a specified storage facility (per par. 4.03) if disposal will be delayed past 30 days.
- 8.7 A PCB transformer which is not in service but is to be stored for other than permanent disposal is exempt from any storage requirements, provided it is not leaking.

#### 9. INTERIM MEASURES PROGRAM FOR PCB TRANSFORMERS

- 9.1 The Interim Measures Program which must be complied with in order to continue using PCB transformers was enacted for the following reasons:
- 9.11 Section 6(e) of the Toxic Substances Control Act prohibits the use of PCB's ecept in a "totally, enclosed manner." The EPA in its regulations considers PCB transformers as "totally enclosed," thereby allowing their continued use. However, the U.S. Court of Appeals ruled that the EPA's definition is unsupported and they require the EPA to undertake a program of testing and rulemaking to be completed in late 1982. Therefore, in order to continue using PCB transformers, the owner or operators must institute the risk reducing activities of the Interim Measures Program.

- 9.2 The following procedures must be followed with respect to all PCB transformers in use or stored for reuse.
- 9 21 A visual inspection of each PCB transformer shall be performed every three (3) months.
- 9.22 All leaks shall be recorded. If a transformer is found to have a moderate leak, servicing is required and must commence two (2) business days from the date the leak is observed. Leaks are defined as:
  - 9.221 Leak PCB's on any portion of the transformer's external surface.
- 9.222 Moderate Leak A leak which results in PCB's running off or about to run off any external surface.
- 9.23 Records, containing inspection and servicing history for all PCB transformers in use or stored for use shall be maintained for three (3) years and shall be available upon request by EPA. The records shall contain the following information on all PCB transformers:
  - 9.231 Its location.
  - 9.232 The date of each inspection and the name of the inspector.
  - 9.233 List all leaks and moderate leaks and the date observed.
- 9.234 Describe all servicing performed on the transformer from the date of the first inspection and the date of subsequent servicing.
- 9.24 The Interim Measures Program ent into effect on May 11, 1981 and the first inspection must have been completed by August 10, 1981.

#### 10. HYDRAULIC SYSTEMS

- 10.1 PCB's may be used in hydraulic systems and may be processed and distributed in commerce for purposes of filtering, distilling or otherwise reducing the concentration until July 1, 1984 provided that:
  - 10.11 Each hydraulic system used for setal forming operations such as die casting, or other systems that ever contained PCB's be tested no later than November 1, 1979 and annually after that until PCB concentrations are below 50 PPM.
  - IO.12 If the original test shows the PCB concentration to be above 50 PPM, the system must be drained and filled with non-PCB hydraulic fluid. This must be done within six months of the original test and annually thereafter until concentrations are below 50 PPM.

- 10.13 Hydraulic systems may be topped off with non-PBC hydraulic fluid to reduce concentrations.
  - 10.14 Addition of PCB's to any hydraulic system is prohibited.
- 10.15 Data from testing operations must be retained for five years after the hydraulic systems reach 50 PPM.

#### 11. SPILLS

- 11.1 In the event of a spill, the following procedure should be followed:
- Il.11 Report the spill to your Regional EPA office which will in turn notify the Coast Guard if necessary. Also, please notify Assistant Manager, Energy and Environmental Engineering on CORNET 222-3502.
- 11.12 The spilled liquid should be cleaned up using rags and/or other absorbent material. Where possible, non-flammable solvents such as Freon TF, l,l,l-Trichloroethane or high-flash mineral spirits should be used to rinse or scrub the surface. Where the spill is on soil, remove a sufficient quantity until you are confident the concentration will be below 50 PPM.
- 11.13 Any contaminated solvent and any liquid PCB's generated by clean up operations shall be stored in accordance with paragraph 4 of this instruction pending disposal by Annex I incineration.
- Il.14 Non-liquid PCB's such as rags, soil, rubber gloves and any other contaminated articles generated by cleanup operations shall be stored in accordance with paragraph 4 of this instruction pending disposal in an Annex II landfill.

#### 12. PENALTIES FOR FAILURE TO COMPLY

- 12.1 Failures to comply with this regulation is a violation of Section 15 of the Toxic Substances Control Act.
- 12.2 Any violation of a provision of Section 15 carries a civil penalty of up to \$25,000 per day for each violation and/or criminal penalty of up to one year imprisonment.

ISSUED BY
MANAGER OF ENVIRONMENTAL ENGINEERING

Generator Name:	NESTERNIE	ELECTRIC COMPANY	, INC.	
Generator EPA ID No.: NJD00	2139053	-		· · · · · · · · · · · · · · · · · · ·
Generator address: 100 Centra	l Avenue, l	Kearny, N.J. 07	7032	
General description of the Waste:	waste	water Treatment	Sludges <u>-fro</u>	neMetales
Does the waste material descr Class I or DHS Class II materials .18 (inclusive).				
DHS Class I	,		Approximate	Concentration(mg/l
Acrolein	yes	X_no		
Acetylaminofluorene	ves	X_no	-	
alpha-Naphthylamine	yes	Х no		
Aminodiphenyl	yes	X_no	<del></del>	
Auramine	yes	X_no	_	
beta-Naphthylamine	yes	X_no		
beta-Propiolactone	yes	X_no		
Benzidine	·_yes	X_no	<u>.</u>	
bis(Chloromethyl) Ether	yes	X no		
Cadmium Salts	yes	X_no	_	
Chlornaphazine (bis (2-Chloroethyl) 2-Naphthylamine)	yes	X no		
Dichlorobenzidine	yes	X_no	-	
Dichlorodiphenyltri- chloroethane (DDT)	yes	<u>X</u> no	_	
Dimethylaminoazoben- zene	<sup>-</sup> ''98	on <u>y</u>	-	
Dioxins		X no	_	
Endrin	yes	X no	-	
Ethyleneimine	yes	<u>X</u> no	_	
Heptachlor	yes	<u>X</u> no		
Heptachlor Epoxide	yes	<u>X_</u> no	_	
Kepone	yes	X_no	-	

DHS Class I			Approximate Concentration -
Mercury Compounds	yes	X no	· .
Methyl Chloromethly Ether	yes	X no	
Methylene-bis-Chloraniline	yes	no	
Mirex	yes	Xno	·
Mustard Gas (bi~Chloroethyl Sulphide)	yes	X_no	
Nickel Carbonyl	yesyes	X_no	<u> </u>
Nitrobiphenyl	yes	<u>no</u>	
Nitrosodimethylamine	yes	<u>Ç</u> no	
Phosphorus (White)	yes	X no	·
Polybrominated Biphenyls (PBB)	yes	<u>X</u> no	<del></del>
Polychlorinated Biphenyls (PGB)	yes y	X <u>*</u> no_ <i>v</i>	·
Tetrachlorodiphenylethane (TDE)	yes	X_no	
Tetraethyl Pyrophosphate	yes	X_no	
Vinyl Chloride Monomer	yes	X_no	
DHS Class II		•	
Aldrin	yes	<u> </u>	
Antimycins	yes	<u>X</u> no	<u> </u>
Arsenicals	yes	X_no	**************************************
Asbestos in Fibre Form	yes	<u>χ</u> no	
Chlordane	yes	<u>X</u> no	
Chromates	<u>χ</u> yes	no	TRIMALO.2 Chrome (E.P. Extract)
Cyanides	X_yes	no	Congress <sup>2</sup> 0.1 (E.P. Extract)
Dimethyl Formamide	yes	X_no	
Disulfoton	yes	X no	·
Endosulfan	yes	<u>y</u> no	
Estrogenic Compounds	yes	<u>X</u> no	
Flouroacetic Acid, and its salts	yes	X no	·
Cuthion	VPS	X no	

#### Western Electric

Corporate Engineering

022 Broadway New York N.Y. 10038 210 669 2045

JUL 1 2 1983

MR. J. KREITZ Engineering Manager

Kearny Works

#### Re: Weste Treatment Plant and RCRA/PCB Surveys

Attached for your information are two (2) Memoranda; one on our waste treatment plant survey and the other on our RCRA/PCB survey, both prepared by Mr. E. T. Lee of my organization.

Mr. Lee was extremely well pleased with the operation and maintenance of your waste treatment plant. Except for a couple of minor comments about the hazardous waste storage facility, your RCRA/PCB program is also considered satisfactory.

We appreciate the assistance provided to Mr. Lee by your staff during the surveys.

T.)A. MULHERN, P.E. Energy and Environmental

Engineering Manager

Att.

#### MEMORANDUM FOR PEGGRE

#### \_==:\_\_PIRA/PGB-Servey-as-the\_Mearny Works

On June 20 and 20, 1980, Inconsucted a RCRA/PCB survey at the Hearny Works West's. Bruce Rapp, Chris Tranchetti, and Angelo Basile hosted the tolk and provided assistance during the survey. Last onsite survey was continuated in October 27, 1981.

#### ROPA Compliance Survey

The following categories of hazardous waste are managed under ROFA:

Faint sludge

Chlorinated Solvents - methylene chloride, perchloroethylene, trichloroethylene, etc.

Fluorinated Solvents - variety of Freens

Flannable Solvents - MIN, Varsol, Mylene, acetone, alcohols, etc.

Varmishes

Miscellaneous Corrosives

Cyanide Sludge

Waste Oil

All these wastes except waste oil are manifested. Waste oil has been listed as hazardous waste by New Jersey D.E.P. effective January 17, 1983, but manifesting is exempted for generators who produce less than 1001 gallons per month (see attached New Jersey Register).

1. Manifest - Kearny Works is in compliance with both the

- Containers The containers observed in the storage area were in good condition with proper DOT and EPA hazardous waste labels.
- 3. Written Inspection Plan The storage area is inspected daily for leaking and rusting containers and the security of the gate and drain system as indicated by the attached Storage Area Inspection Record sheet. Also maintained is a daily Storage Tracking Record. Both records were modeled from the information provided by the NJ DEP for the TSD (Transport, Storage and Disposal of Hazardous Waste) annual report requirements.

- 4. Contingency Plans A type written plan was available with emergency coordinators designated.
- 5. Additional Records No exception reports have been filed to date. Test results on walte analysis performed annually are kept on record. No incident reports have been filed.
- 6. Storage Facilities The storage area, a 135' x 35' asphalt pad, is open to weather and fenced in with an 8' chain link fence. The enclosure is secured by a lock and clearly identified as a hazardous waste storage area by a large warning sign. There is telephone service about 250 feet away. Fire extinguishers had been ordered but not yet installed. See attached Job Request originated by Mr. Tranchetti, dated October 26, 1981.

The storage pad is diked but the curb has valved openings. Some of the valves were left open during the tour. Mr. Transhetti has asked that these openings be capped. Otherwise, the drainage system for the storage pad, as described in last survey report dated October 27, 1981, meets the applicable RCRA requirements.

#### PGB=Inspection

Contained in drums and some rags. The two transformers in outside of storage at the south side of Building 170 were removed from premises on September 29; 1982 to Emelle, Alabama, as indicated by the attached disposal documents. There were II transformers in service, four outside and seven inside installations. There were ten 30-gallon drums and two partial drums of virgin PCB liquid stored in Building 25 on the 5th floor. This new PCB drum storage area is above the 100 years flood level. The area was locked and was not inspected because the are stacked in pairs within a 80-gallon drum which serves as diked area. He also stated that all the drums are properly labelled?

The PCB transformers were toured and were found properly labelled with mark "It". Annual PCB surmary and quarterly inspection records were reviewed and found to be satisfactory. In summary, the PCB program was in compliance with applicable TSGA regulations.

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E. T. LEE Senior Engineer

:rb

Ralph L. McMurry Corporate Counsel Lucent Technologies Inc. Room B2168 131 Morristown Road Basking Ridge, NJ 07920

Telephone 908 630 2818
Facsimile 908 204 8565
Internet address
rmcmurry@lucent.com
February 28, 1997

Mr. Pat Evangelista Emergency and Remedial Response Division U.S. Environmental Protection Agency 290 Broadway, 19<sup>th</sup> Floor New York, NY 10007-1866

Re: Request for Information

Diamond Alkali Superfund Site, Passaic River Study Area

Dear Mr. Evangelista:

This is the response of Lucent Technologies Inc. ("Lucent") to EPA's CERCLA 104(e) Information Request to AT&T Technologies, Inc. dated December 30, 1996 (the "Request"). This response is made on information and belief and is based upon the investigation undertaken by Lucent on behalf of and/or in place of AT&T Corp.

Lucent appreciates EPA's grant of an extension to respond to the Request.

General Response and Objections

At the outset Lucent objects to the Request on a number of grounds.

First, the Diamond Alkali Site is not defined. The Request does not state where the Site is located. Lucent requests that EPA provide some reasonable definition of the Diamond Alkali Site.

Second, the "Passaic River Study Area" is not defined. The Request does not state what is meant by "Passaic River Study Area" and gives no clue as to its boundaries. CERCLA defines "facility" in terms of discrete sites or locations, not unbounded "study areas". Lucent requests that EPA provide some reasonable definition and delineation of the "Passaic River Study Area."

### RESPONSES OF LUCENT TECHNOLOGIES INC. TO EPA REGION II REQUEST FOR INFORMATION REGARDING DIAMOND ALKALI SUPERFUND SITE, PASSAIC RIVER STUDY AREA

- 1. The Western Electric Company Kearny Works was in operation from 1925 to 1984.
- 2. a) Kearny Works was an authorized hazardous waste generator and storage facility under EPA ID No. N.J.D. 002139053.
  - b) NJDEP Air Pollution Permits included nos.: 12496,12775,12776,12777,12787,12802,43521,16447,16448,16449,16450,43203, 22526,22527,22528,40129,40130,43091,43094,48837,48838,48839,48840,48841, 49777,49778,49779,49780,49781,49782,52218,52219,52220,52221,52222,52223, 1-2655,1-2656,1-2657,G7174,G043677.

Kearny Works was subject to NPDES Permit No. N.J.-0020443 for six outfalls into the Passaic River.

The foregoing permits were those in effect at the time the Facility ceased operations. The state of New Jersey was notified (see Attachment A).

3. It is impossible to answer this question fully. The question addresses the operations and processes of a complex manufacturing facility going back three quarters of a century. Many of the substances listed were found in numerous raw materials used in operations. Also, some of the compounds in the list are the result of a combination of raw materials in a manufacturing process. The question expects Lucent to prove the negative.

Notwithstanding the foregoing objection, a-list-of-substances-at the Facility included:

ammonia, boric acid, fluorene compounds, hydrochloric acid, nitric acid, perchlorethylene, sulfuric acid, trichlorethylene, xylene, PCBs, chromium, copper, lead, nickel zinc, cyanide.

- 4. It is impossible to answer this question fully. The question addresses the operations and processes of a complex manufacturing facility going back three quarters of a century.
  - a) The Kearny Works location of AT&T Technologies, Inc. employed approximately 4,000 people (early 1984 figures) in 36 buildings, some multi-story, on a 147 acre tract

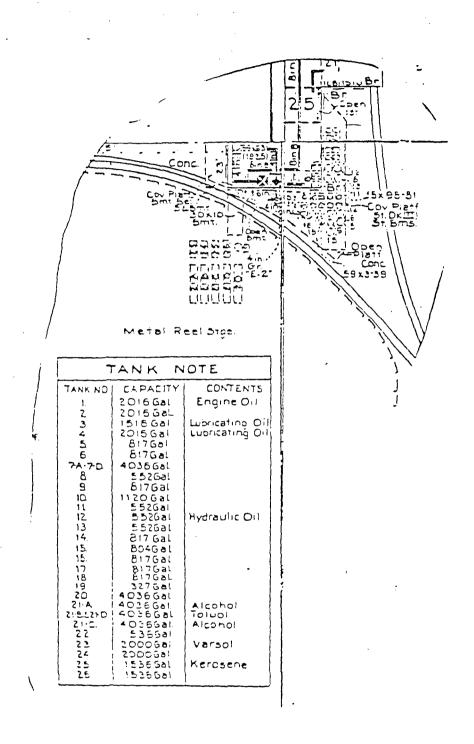


Figure 3-1 Location and former contents of underground storage tanks in vicinity of Building 25

#### RIVER TERMINAL DEVELOPMENT COMPANY

REAL ESTATE DIVISION

100 CENTRAL AVENUE - BUILDING 30 - 6TH FLOOR SOUTH KEARNY, NEW JERSEY 07032-4696

TELEPHONE: 201 589-0063 212 962-4366

TELEX II 710 995-4466

PANAFAX: 201 589-7966

June 18, 1990

Mr. Joseph W. Phillips Fire Department Chief Town of Kearny Kearny, NJ 07032

Dear Mr. Phillips:

This letter is to inform you that as of June 12, 1990, all but one of the transformers containing PCB's have been removed from our South Kearny location. At this point, the only transformer remaining on site that contains PCB's is General Electric Transformer Number H886059A (Please refer to list mailed to you on August 25, 1989). Presently, we are in the process of deactivating this transformer and replacing it with a non-PCB type. This should be accomplished over the next several weeks. You will be notified once the unit has been shipped out.

Very truly yours,

Frank David Kobola Project Manager

FDK:dn

cc: Frank Kobola

Martin Ytuarte Bill Rudolph Document D367-200 July 1985:

Prepared for AT&T Technologies, Inc. Kearny, NJ

### Amended Environmental Clean-up Plan, Kearny Works AT&T Technologies, Inc.

(Formerly Western Electric Company, Inc.)

Prepared by Dr. William A. Duvel, Jr., P.E. R. John Finn John M. Lambie

ERT

ENVIRONMENTAL RESEARCH & TECHNOLOGY, INC. ATLANTA - CHICAGO - CONCORD, MA - FORT COLLINS, CO HOUSTON - LOS ANGELES - PITTSBURGH - WASHINGTON, DC

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activities attributable to AT&T's operation. Most of the other locations where wells have been installed on the property show the same non-uniform vertical distribution as that evidenced in well AT&T 13, although the differences between highs and lows are not as pronounced (see Table VIII of Appendix E). If spills or operational problems had occurred, one would expect to find a pattern with a high concentration at the surface and decreasing amounts at depth.

The absence of this type of pattern indicates that in all probability the PHC's are attributable to the original fill materials which were brought to the site. A mix of fill was used and it is likely that industrial process residues were mixed with soils to create the Kearny works property. The nearly universal distribution of PHC's at some level of detection across the site at all depths is conformation that PHC's are representative of a background condition.

#### 2.4.2 Area 11 and 12 - Underground Storage Tanks

The 32 underground storage tanks in area 11 and 12 have all been opened and visually inspected and found to contain sand/cement mixtures up to the level of the manhole lid. No excavation or further action is therefore required in this matter.

#### 2.4.3 Area 11 and 12 - PCB Contaminated Soil

The results of soil sampling in areas 11 and 12 have demonstrated the vertical and horizontal extent of PPCB contamination. Figure 2-4 (see map pocket) shows the location and depth of soil samples, the analytical results at each location, and the planned excavation profile.

The nature and distribution of PCB contamination clearly demonstrate that the source of contamination is the transformer located at Building 21. The transformer contains Aroclor 1260 and all the soil samples (as well as the water samples from well AT&T 9) show only Aroclor 1260. The very high concentrations near the transformer and high concentrations at depth in this location taper to very limited surface contamination at points farther away from the transformer.

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Excavation in this area will include removal of the railroad tracks, ballast, and contaminated soil. The unpaved areas between the building and loading docks will be excavated.

#### 2.4.4 Area 4, 5, 6 - PCB Contaminated Soil

On June 12, 1985 soil samples were collected from six locations along the railroad track between the roadway and well 11. These sampling locations are shown in Figure 2-6. Locations 4-15 and 4-16 were taken approximately 15 feet northwest and southeast respectively of the railroad track to determine the lateral extent of any contamination in this area. At each location, soil samples were taken at one foot intervals in the soil column to a depth of ten feet. Samples from the following depths were subjected to analysis: 0-1 foot, 2-3 feet, 4-5 feet, 6-7 feet and 8-9 feet. The results of the analysis of these samples are shown in Table A-13 and Figure 2-6. Also shown are the results of analyses of PCB's in soils at well 11 taken earlier in 1985 during the installation of well 11.

The data in Table A-13 show that there are isolated areas of PCB contamination of surface soils between the roadway and well 11. The absence of PCB's at all depths in well 11 soil samples indicates that the contamination does not extent west of these locations. Likewise, the absence of PCB's at locations 4-15 and 4-16 indicates that the contamination is not widespread on either side of the railroad at these locations. The concrete pad north of the tracks limits soil contamination in that direction.

The source of PCB contamination appears to be related to and limited to the area around the concrete pad which was formerly used for storage of chemicals and petroleum products.

The PCB contamination discussed above is solely a surface condition and is within the limits of excavation of Area 4, 5, and 6 as defined on Figure 2-3 which, for other reasons, has previously been targeted for excavation. This excavation includes an area of approximately 49,400 square feet to a depth of four feet and 5,600 square feet to a depth of six inches. Thus, the discovery of PCB contamination in this area will not require the excavation of

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additional quantities of soil. The existence of PCB contamination, however, will affect the disposition of contaminated soil following excavation. The extent of PCB contamination in Area 4, 5, and 6 will be determined by taking additional soil samples in advance of excavation. A sampling grid will be established on 50 foot centers. Three soil samples will be obtained at each grid node at depths of 0-6 inches, 6-12 inches, and 12-18 inches. These samples will be analyzed sequentially to determine the vertical and lateral extent of contamination. If no PCB's are present at the surface, it will be assumed that no PCB's are present at greater depth. PCB contaminated soil will be disposed of at a secure landfill.

Because the full extent of soil contamination from PCB's in Area 4, 5, and 6 will not be determined until the time of excavation, it is not possible to precisely estimate the quantity of soil which will have to go to a secure PCB landfill. The analytical data indicate that the PCB contamination is associated with the surface soil. If it is assumed that all of Area 4, 5, and 6 is contaminated with PCB's such that the top six inches must go to a secure landfill, the total volume required to go to a secure landfill would be 1222 cubic yards from this area. At a net increase in cost of \$204 per cubic yard, the increase in cost would be \$250,000. There would be no change in the anticipated schedule of removal activities. This "contingency" cost is includes in the cost estimates provided below.

#### 2.4.5 PCB Contaminated Soil at Other Areas

Figure 2-5 (see back pocket) shows five locations of the five PCB transformer sites now or formerly located at the Kearny Works. Of these sites, three are inside buildings with continuous concrete floors. The associated transformers are in good condition and there is no opportunity for PCB's to come in contact with soil. The transformer locations were inspected on June 5 and no sumps were found to provide access outside the buildings (see "Memorandum of Record" dated June 6, 1985 provided as Exhibit 2-1).

**3** ∙,

June 6, 1985

#### MEMORANDUM FOR RECORD

Re: Inspection for Sumps in Areas Adjacent to PCB Transformers in Buildings 32 and 72 Basement and Building 186-1.

On May 30, 1985, Maria Kent, Kearny's ECRA case manager, requested an inspection of the Building 32 Basement PCB Transformer area for the presence of sumps. The purpose of the request was to insure that, in the eventuality of a PCB leak, there would be no possibility that the PCB material could enter any water way.

On June 5, 1985, Mike Frank, one of Kearny's Plant Inspectors, and I performed the requested inspection. However, instead of just inspecting the Building 32 Basement area, we also inspected the other two areas in Kearny, Building 72 Basement and Building 186-1, wherein PCB Transformers are located.

The inspection procedure and results follow.

In each of the three locations, the area in which the transformers were secured and the entire viewable area in that building adjacent to the secured location were visually inspected for the presence of a sump. Approximately 10,000 square feet were visually inspected at each location.

The result was the same at all three locations. There were no sumps within the area inspected.

G. C. TRANCHETTI, CSP - 23310

Copy to:

A. Basile - Union

W. Duvel - ERT

M. Kent - NJDEP, ECRA

M. Frank - 23310

Signed this 6th day of June, 1985.

Electer J. Hagedon

HELEN J. HAGADORN
NETARY PUBLIC OF NEW JERSEY
My Commission Expires Dec. 5, 1987

A8A000863

The other two PCB transformer locations are outdoors. The transformers in the building 170 area were removed when the building was demolished. Extensive surface and subsurface soil sampling has been done in the building 170 area to identify PCB contaminated soil. PCB contaminated soil is being properly addressed through soil removal in areas 21 and 22.

There are no other known sources of PCB's present on site. Additional surface and subsurface soil samples were taken while drilling wells AT&T 1, 3, 7 and 11 and showed no PCB's in soils at these locations. PCB sampling and on-site investigation indicates that the area of PCB contamination has been established and that no further sampling is necessary.

#### 2.4.6 Areas 48 and 49

The analytical data show that soils in areas 48 and 49 exceed the criteria of Table 2-1. However, due to the number of density of utility lines in this area, soil excavation cannot safely be accomplished (See Figure 2-7). These areas contain 3 LPG gas tanks and a 10 inch gas line which services the entire plant. In addition there is a 13.5 kVA electric main that crosses these areas. These areas are in a remote corner of the property, surrounded by an eight foot high chain-linked fence with locked gates and are inaccessible to unauthorized persons.

#### 2.4.7 Catch Basins

Eighteen catch basins (including those noted as 35 and 36) will be cleaned out with an orange peel bucket or similar device. Cleanout has been demonstrated to be ID #27 waste and will be disposed of in a local landfill. The catch basins to be cleaned are shown on Figure 2-3.

932500235

TABLE A-1 (Continued)

Sampling Location	Arsenic_PA/K	Cadmium _₽&≦s	Chromium	Copper_ _ ME(E .	tiond ug/g	Nickel RE/E.	Selenium UK/K	Zinc HE/E	Cyanido _x&/&	Total VOA	PHC**	PCB PE/E
16-10-X	40	-	340	150	190	160	÷	290	-	ир	-	
16-10-Y	16	-	38	6.5	78	38	-	200		0.8		
16-10 · Z	9.6	-	31	120	180	29	-	120	-	18.5	-	
16-CB-1*	14	1.7	260	-	240		<1.3		-	-		
16-CB-2	15	2.4	310	600 .	130	-	<1.3		-	-	-	
17A	4.2	<0.25	<25	88	<25	<25	<2.5	4.8	-	-	-	
17B	20	4.1	210	400	600	92	<2.5	680	•		-	
17-1-X	2.6	-	34	46	120	16	-	200	-	ND	-	
17-1-Y	17	-	960	110	130	59		140	-	-	-	
17-1-Z	1.0	-	19	38	13	14	~	62	-	2.8	-	
1 7 - 2 - X	16	-	210	150	640	56	-	280	-	9.6	-	
17-2-Y	24	-	2800	11	130	180	-	230	-	80.7		-
17-2-Z	17	- ,	140	410	170	83	-	430	-	27.2	-	-
188		-	-	-	-	-	-	-	-	-	-	-
188	-	-	~		-	٠.	-	-	-	-		-
198	8.9	<0.25	<21	84	54	22	<2.6	73	<12	=	-	-
19A (Dup)	6.2	<0.25	< 28	6.8	55	29	<3.4	120	<12	-	-	-
198	3.1	<0.25	<21	28	<21	16	<2.1	45	<12	-		-
20A	17	0.38	28	70	190	84	<2.3	160	<12	0.03	-	•
20B	15.	0.47	47.	130	150.	45	< 2 . 6	230	<12	-		-
20B (thip)	12	-	32	83	120	43	<2.9	180	<12	-		-
21A	10	-	50	55	250	<25	<2.5	130	<12	_	~	1.1
218	26	**	6.8	160	700	6.5	<2.5	420	<12	0.039		12
21-1-B	-	-	-	-	-	-	-	-	-	-	-	9.4
21-1-A	-	-	-	-	-	~	-	-	-	-		2.3
21-2·B	-		-	•	-	-	-	•	-	-	-	4.1
21~2 B (Dup)		-	· -	~	-				-	-		3.4
21-2· A	-	-			-	-	-	-	-	-	-	1.6
21-3 В	-		-		-	-	•		-		•	32.3
21-3-A	-		-	-	-	-		-			•	<1.0
21-6· A		-	-	-	-	-			-	-	**	2.5

<sup>\*</sup>Represents the average of two analyses on same sample.

<sup>\*\*</sup>Conducted by Chyun Associates

<sup>&</sup>quot;X" and "B" denote surface samples. Key:

<sup>&</sup>quot;A" denotes 12" - 36" homogenized sample.

<sup>&</sup>quot;Y" denotes 18" grab sample.

<sup>&</sup>quot;Z" denotes 36" grab sample.



#### TABLE A-1 (Continued)

. Sampling Location	Armento _ME/E	Cadmlum _NS/S _	Chromlum Hg/B	Copper _us/&	Lead v <u>g/g</u>	Nickel _PE/E.	Selentum uk/k	Zinc PR/E	Cyanlde _vE/E	Total VOA	PHC**	PCB PE/E
21-7-X	-	-	_	-	150		-	410	-	-	-	1.5
21-7-Y	-	-	-	-	240	•		270	-		-	ND
21-7-Y (Dup)		-	-	-	560	-	. •	600	-			ИВ
21-7-2	-	-	-	-	490		-	350	-	-	-	ИD
21-8·X		-	-	38	-	100	•	-	-	-	-	1.7
21-9-X	-	-	-	-	50	-	-	140	-	-	-	HD
21-10-X	-		-	-	<25		-	95	-			ИD
21~10-Y	-	-	-	-	5.5	-	-	250	-	<del>-</del>		иn
21-10-Z	-	-	-	-	96	-	<u>-</u>	300	-	-	-	нD
22A	10	-	52	5.5	590	<25	<2.5	550	<12	-	-	4.1
220	12	-	50	78	410	38	<2.5	350	<12	0.031	-	21
22-1-B	-	-	_	-	-	-	-	-	-	-	-	6.5
22-1- A	-	-	-	-	-	••	-	-'	-	_	_	19.8
22-2-B	-	-	_	-	-	-	-	-	-	-	-	2.6
22-2-A	-	-	-	-	-	-	-	-	-	-		2.9
22-3-B	-		-	-	-	-	-	-	-	-	-	3.1
22-3-A	-	-	-	-	-	_	-	_		-	-	9.6
22-4-B	-	-	-	-	-	-	-	-	_	-	-	2.6
22-4-A			-	-	-	-	-	-	-	-	-	5.8
22~5-B	-	-	-	-	_	_	_	-	-	-	-	4.5
22-5-A	_	-	-	-	_	-	_	_	_	-	-	5.4
22-6-B		-	-	_	_	-	-	_	-	-	-	6.2
22-6-A	•	*	_	_	_	_	<u></u>	_	-	-		<10.0
22-7-8		-	_	**	_	_	-	_	-	-		2.7
22-7-B (Nip)	-	-	-	-	-	-	_	-	-	-		4.4
22-8 B	_	·	-	_	_	_	-	_	-	-	~	16.5
22-9·B	-		_		-	-	-	-	-	-		15.0
22- 9- A	-	•	_		٠,	-	-	-	-	-		<b>&lt;10.0</b>
22-10-X			-		65	-		160		_		нn
22 - 11 - X			_		51	•	-	120		-		ND
2212- X	-		-		110	-		290	-	-		RD

<sup>\*</sup>Represents the average of two analyses on same sample.

<sup>\*\*</sup>Conducted by Chyun Associates

<sup>&</sup>quot;X" and "B" denote surface samples. Key:

<sup>&</sup>quot;A" denotes 12" - 36" homogenized sample.

<sup>&</sup>quot;Y" denotes 18" grub sample.
"Z" denotes 36" grub sample.

TABLE A-1 (Continued)

Sumpling Location	Arsenic _H&/&	_EB∫B	Chromium	Copper_ _PE/&_	Lead PE/E	Nickol _PE(E_	Selonium N&\&	Zinc	Cyanldo _PE/E	AOV fafoT	PHC**	PCB PEZE
22-12-Y	-	-	-	•	310	-		1400		-	-	нр
22-12-Z	-	-	•	-	150		-	400	-	-	-	1.3
238	1.3	<0.25	30	7.8	45	10	<2.5	170	<12	•		-
24B	6.2	₹0.25	<19	. 26	<19	20	<1.9	56	<12	-	~	-
25A	5.0	-	<25	150	88	₹25	<2.5	750	<12	-		-
258	15	∢0.25	40	42	30	25	<2.5	100	<12		-	-
25-1-X	_	-	-	-	210	-	-	250	-	-	-	
25-1-Y	-	-	-	-	460			100	-	-	-	
25-1-2	-	-	-	-	210	-	-	170	-	-	-	
25-2· X	-	-	-	-	1100		-	2500	-	-	-	
25-2-Y	-	-	-		130	-	-	310	-	-	-	
25-2-Z	-	-	-	_	-	-		100	-	-	-	
25-2-2 dup		-	-	-	-	-	-	300	-	-	-	
25-3-X	-	-	-	-	-	-	_	350	-	-	-	
26 A	8.1	-	1580	170	230	126	<2.9	1370	<12	-	-	
26B	6.9	-	<28	61	< 28	28	<2.8	77	<12	-		
26-1-B	9.6	∢0.25	34	48	48	-	<1.4	_	-	-	-	
26-2-B	8.1	₹0.25	32	38	10	-	<1.3	-	-	-	-	
26-3-B	9.9	∢0.25	30	30	44	-	<1.4		-	-		
26 - 4 - B	6.4	40.25	21	32	49	-	<1.2	-	-	-	-	
26-5-B	7.3	40.25	33	35	53	-	<1.2	-	-	-	-	
26-6-B	6.8	41.8	37	110	290	-	<1.4	-	-	-	-	
26-7 B	8.2	۷0.25	21	33	51	+	<1.4	-	-	-	-	
26-8-B	5.5	<0.25	19	20	25	-	<1.4		-	-	-	
26-8-B (Dup)	7.1	<0.25	23	23	30	-	<1.2	-	-	ū	-	
21A	5.8	-	<28	58	47 •	22	<2.7	94	<12	-		
27B	8.6	∢0.25	₹26	42	36	31	< 2 . 6	100	<12	0.035		
2 A A	1.5	-	25	52	52	₹25	<2.5	140	<12	ND	-	
28B	18	<0.25	32	22	<25	<25	<2.5	45	< 12	ND	-	
29A	12.	-	<28	150	200	28	<2.7	170	<12		-	
298	19.	3.8	56	130	390	51	<3.0	1220	<12	0.025		

<sup>\*</sup>Represents the average of two analyses on same sample.

Key:

<sup>\*\*</sup>Conducted by Chyun Associates

<sup>&</sup>quot;X" and "B" denote surface samples.

<sup>&</sup>quot;A" denotes 12" - 36" homogenized sample.

<sup>&</sup>quot;Y" denotes 18" grab sample.

<sup>&</sup>quot;Z" denotes 36" grab sample.

# TABLE A-6 TOTAL PCB'S IN SAMPLES COLLECTED OCTOBER 4-10, 1984, AT&T, KEARNY WORKS

Sampling Location	Total PCB's µg/g
21-1-B	9.4
21-2-B	4.1
21-2-B (Dup)	3.4
21-3-B	32.3
21-1-A	2.3
21-2-A	1.6
21-3-A	<1.0
21-6-A	2.5
22-1-B	6.5
22-2-B	2.6
22-3-B	3.1
22-4-B	2.6
22-5-B	4.5
22-6-B <sup>1</sup>	6.2
22-7-B	2.7
22-7-B (Dup)	4.4
22-8-B	16.5
22-9-B <sup>1</sup>	15.0
22-1-A	19.8
22-2-A	2.9
22-3-A	9.6
22-4-A	5.8
22-5-A	5.4
22-6-A	<10.02
22-9-A	<10.02

These samples were ~10' from the concrete vaults.

<sup>&</sup>lt;sup>2</sup>High detection limits for these samples due to interference.

<sup>&</sup>quot;B" denotes surface sample

<sup>&</sup>quot;A" denotes 12" - 36" homogenized subsurface sample.

## TABLE A-7 TOTAL PCB'S IN SAMPLES COLLECTED May 2-10, 1985 AT&T Kearny Works

Sam	pling	Total PCB's
Loca	ation	ug/g
11-4	0-2'	9.7
	2-4'	4.9
	4-6'	1.5
	4-6'(Dup)	<1.0
11-5	0-2'	42.
	4-6'	7.9
11-6	0-2'	<1.0
	0-2'(Dup)	1.5
	2-4'	<1.0
	4-6'	<1.0
11-7	1-2'	1.0
	2-4'	<3.0
11-8	4-6'	<1.0
	6-8'	<1.0
11-9	0-6"	82
0	-6"(Dup)	68
	2-3'	<5.0
	4-5'	<5.0
	6-7'	<5.0
	8-9'	<5.0
11-10	0-6"	85.
11-11	0-6"	1300.
	2-3'	<5.0
	4-5'	<5.0
	6-7'	6.5
	8-9'	<5.0
	10-11'	<5.0
11-12	0-6"	660.
11-13	0-2'	<1.0
	4-6'	<1.0
11-14	0-2'	1.0
	4-6'	<1.0

# TABLE A-7 (Continued) TOTAL PCB's IN SAMPLES COLLECTED May 2-10, 1985 AT&T Kearny Works

	mpling cation	Total PCB's
11-15	0-2'	<1.0
	2-4 *	<1.0
	6-8'	<1.0
11-16	2-4	<1.0
	6-8'	<1.0
11-17	4-6'	· <1.0
	6-8'	<1.0
11-18	0-2	160.
	2-4'	2.7
	4-6'	5.5
11-19	0-6"	3400.
	3-4 *	<5.0
	5-6	<5.0
	7-8	6.2
11-20	0-6"	430.
	3-4'	<5.0
	5-6'	16.0
	9-10'	<5.0
	11-12'	<5.0
11-21	0-2'	. 33,000
	2-3'	89,000
	2-4'	17,000
	4-6 *	10,500
	7-8 *	1650
	9-10'	690
	11-12'	<5.0
11-22	2-3'	37
	4-5 *	48
	7-8 *	<5.0
	9-10'	<5.0
	11-12'	<5,0

## TABLE A-13 SUMMARY OF ANALYTICAL RESULTS POLYCHLORINATED BIPHENYLS IN SOIL

#### Analytical Results

	Analytical Results			
Field Identification	(ug/g as AROCLOR 1260)			
4-11-1	18			
4-11-3	BDL			
4-11-5	BDL			
4-11-7	BDL			
4-11-9	BDL			
4-12-1	BDL			
4-12-3	BDL			
4-12-5	BDL			
4-12-7	BDL			
4-12-9	BDL			
4-13-1	120			
4-13-3	BDL			
4-13-5	BDL			
4-13-7	BDL			
4-14-1	3800			
4-14-3	6.8			
4-14-5	6.1			
4-14-7	BDL			
4-14-9	BDL			
4-15-1	BDL			
4-15-3	BDL			
4-15-5	BDL			
4-15-7	BDL			
4-16-1	BDL			
4-16-3	BDL			
4-16-5	BDL			
4-16-7	BDL			
4-16-9	BDL			

BDL = Below Detection Limit, 2ug/g (parts per million)

TABLE A-13 (Continued)

Field Identification	_ <u>A</u> _	_ <u>B</u> _	<u> Mean</u>
4-11-1	17	20	18
4-13-1	120	120	120
4-16-1	BDL	BDL	BDL

Results reported in ug/g (parts per million)

As AROCLOR 1260

BDL = Below Detection Limit, 2 ug/g

TABLE A-13 (Continued)

SUMMARY OF LABORATORY PREPARED QUALITY CONTROL SAMPLES

POLYCHLORINATED BIPHENYLS IN SOIL

#### AROCLOR 1260

	Amount	Amount	
	Fortified	Measured	%
	(ug)	(ug)	Recovery
QA-1	510	480	94
QA-2	1540	1330	86
<b>4</b> •	2540	1330	80
QA-3	510	490	96



ENVIRONMENTAL RESEARCH & TECHNOLOGY, INC.

696 VIRGINIA ROAD, CONCORD, MASSACHUSETTS 01742, USA, (617) 369-8910, TELEX: 923 335 ENVIRORES CNCM, CABLE: ERTCON

ERT Document No: D367

ERT Reference No: 120-WAD-261

DIN 24 9 OH MY 85 THE MANAGEMENT HEMAN-BISE

Ms. Maria Kent Bureau of Industrial Site Evaluation New Jersey Department of Environmental Protection 428 East State Street Trenton, New Jersey 08608

Re: AT&T Kearny Works

Dear Maria:

Enclosed please find a draft addendum to the proposed ammended cleanup plan for the AT&T Kearny Works. This addendum addresses cleanup of PCB contaminated soils in the vicinity of the concrete pad located adjacent to Area 4, 5, and 6.

If you have any questions, please do not hesitate to call me.

Sincerely,

Dr. William A. Duvel, Jr., P.E.

Senior Program Manager

June 21, 1985

WAD/rn Enclosure

cc: D. Goldberg

A. Basile

A. Chesler

C. Tranchetti

### Addendum to Amended Environmental Cleanup Plan Kearny Works, AT&T Technologies, Inc.

Kearny, New Jersey
June 21, 1985



#### Sampling for PCB's

In an effort to define the extent of PCB contamination in the vicinity of well ATT 9, AT&T agreed to do additional sampling west of well ATT 9, across the road. On June 12, 1985 soil samples were collected from six locations along the railroad track between the roadway and well ATT 11. These sampling locations are shown in Figure 2-14. Locations 4-15 and 4-16 were taken approximately 15 feet northwest and southeast respectively of the railroad track to determine the lateral extent of any contamination in this area. At each location, soil samples were taken at one foot intervals in the soil column to a depth of ten feet. Samples from the following depths were subjected to analysis: 0-1 foot, 2-3 feet, 4-5 feet, 6-7 feet and 8-9 feet. The results of the analysis of these samples are shown in Table 1 and Figure 2-14. Also shown are the results of analyses of PCB's in soils at well ATT 11 taken earlier in 1985 during the installation of well ATT 11.

#### Interpretation of Results

The data in Table 1 show that there are isolated areas of PCB contamination of surface soils between the roadway and well ATT 11. The absence of PCB's at all depths in well ATT 11 soil samples indicates that the contamination does not extend west of these locations. Likewise, the absence of PCB's at locations 4-15 and 4-16 indicates that the contamination is not widespread on either side of the railroad at these locations. The concrete pad north of the tracks limits soil contamination in that direction.

The source of PCB contamination appears to be related to and limited to the area around the concrete pad which was formerly used for storage of chemicals and petroleum products.

#### Cleanup Plan

ORAFZ The PCB contamination discussed above is solely a surface condition and is within the limits of excavation of 4, 5, and 6 as defined on Figure 2-9 which, for other reasons, has previously been targeted for excavation. This excavation includes an area of approximately 49,400 square feet to a depth of four feet and 5,600 square feet to a depth of six inches. Thus, the discovery of PCB contamination in this area will not require the excavation of additional quantities of soil. The existence of PCB contamination, however, will affect the disposition of contamined soil following excavation. In view of the commitment to excavate and remove soil through this area, additional testing at this time to establish the precise limits of PCB contamination is not necessary. Instead, AT&T proposes to conduct additional soil sampling during the excavation process in Area 4, 5, and 6 at which time the exact extent of PCB contamination can be determined. PCB contaminated soil will be disposed of at a secure landfill.

#### Cleanup Costs

Because the full extent of soil contamination from PCB's in Area 4, 5, and 6 will not be determined until the time of excavation, it is not possible to precisely estimate the quantity of soil which will have to go to a secure PCB landfill. The analytical data indicate that the PCB contamination is associated with the surface soils. If it is assumed that all of Area 4, 5, and 6 is contaminated with PCB's such that the top six inches must go to a secure landfill, the total volume required to go to a secure landfill would be 1222 cubic yards from this area. At a net increase in cost of \$204 per cubic yard, the increase in cost would be \$250,000. There would be no change in the anticipated schedule of removal activities.

#### SUMMARY OF ANALYTICAL RESULTS POLYCHLORINATED BIPHENYLS IN SOIL

Client:

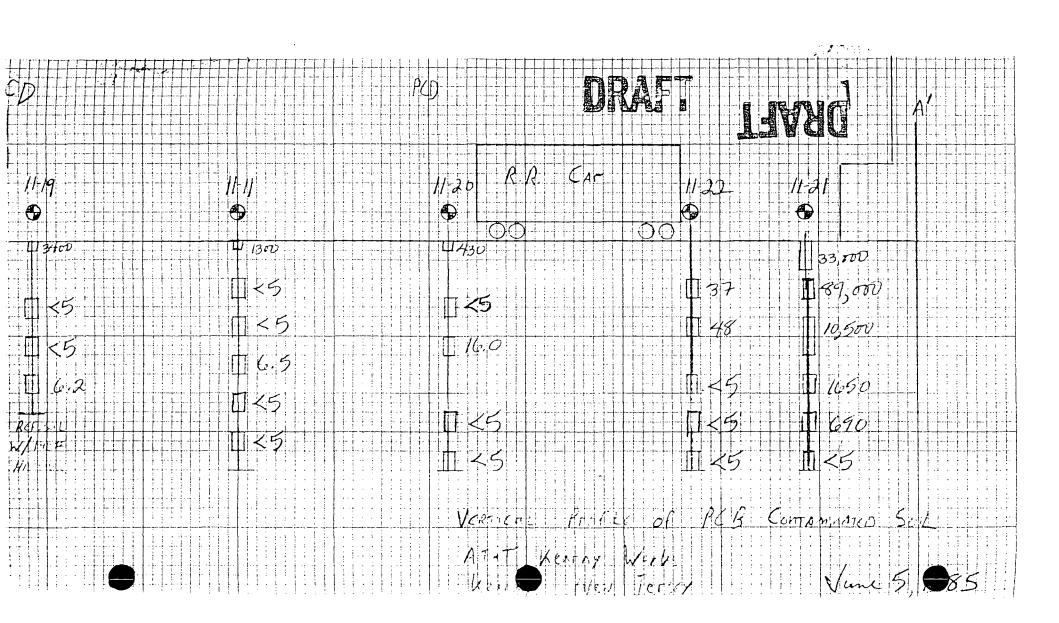
AT&T

Sampling Location: Kearny, New Jersey

Sampling Date: 12 June 1985

ERT No.	Field Identification	Analytical Results (ug/g as AROCLOR 1260)
28407	4-11-1	18
28408	4-11-3	BDL
28409	4-11-5	
28410	4-11-7	
28411	4-11-9	
28412	4-12-1	
28413	4-12-3	
28414	4-12-5	
28415	4-12-7	
28416	4-12-9	
28417	4-13-1	120
28418	4-13-3	BDL
28419	4-13-5	
28420	4-13-7	
28421	4-14-1	3800
28422	4-14-3	6.8
28423	4-14-5	6.1
28424	4-14-7	BDL
28425	4-14-9	BDL
28473	4-15-1	BDL
28474	4-15-3	
28475	4-15-5	
28476	4-15-7	
28477	4-16-1	
28478	4-16-3	
28479	4-16-5	
28480	4-16-7	
28481	4-16-9	
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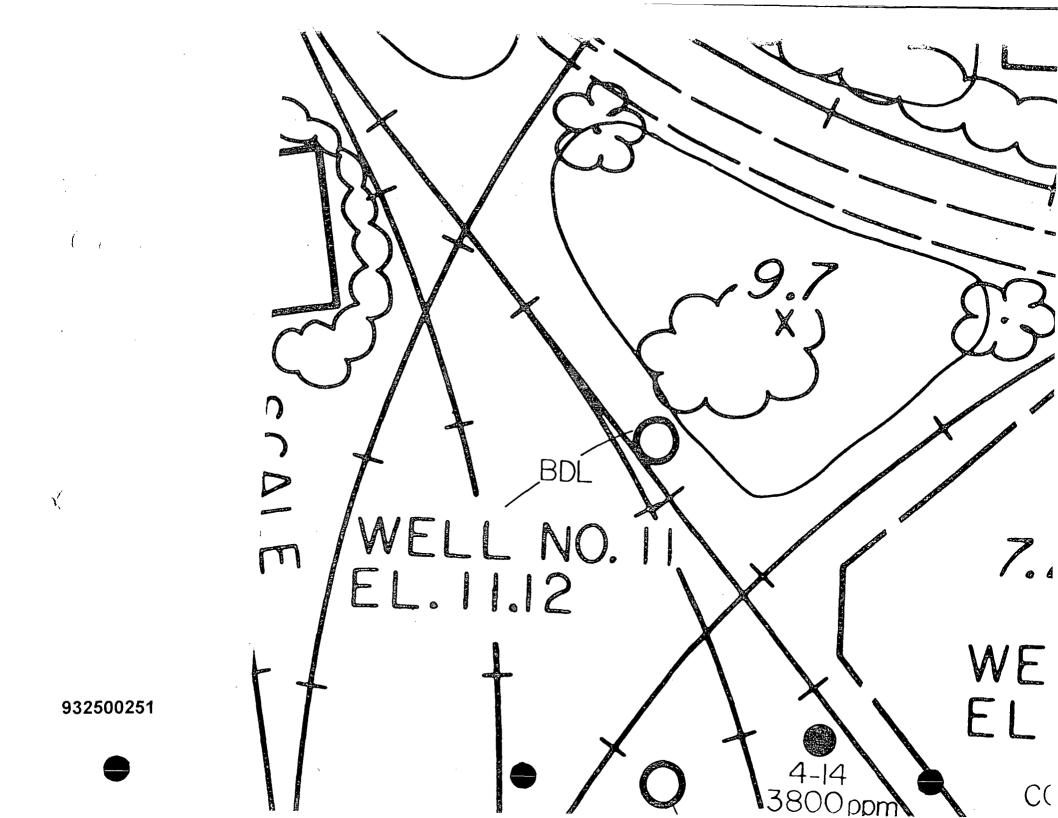
## TABLE A-7 TOTAL PCB'S IN SAMPLES COLLECTED May 2-10, 1985 AT&T Kearny Works

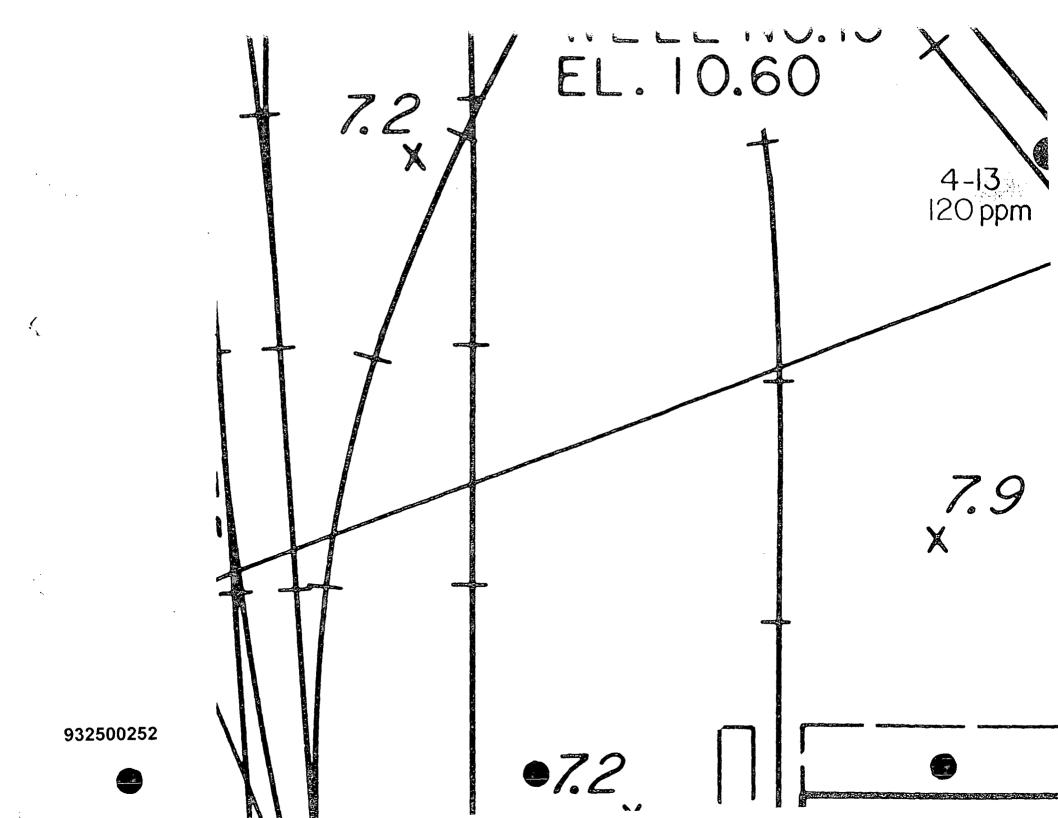
Soils

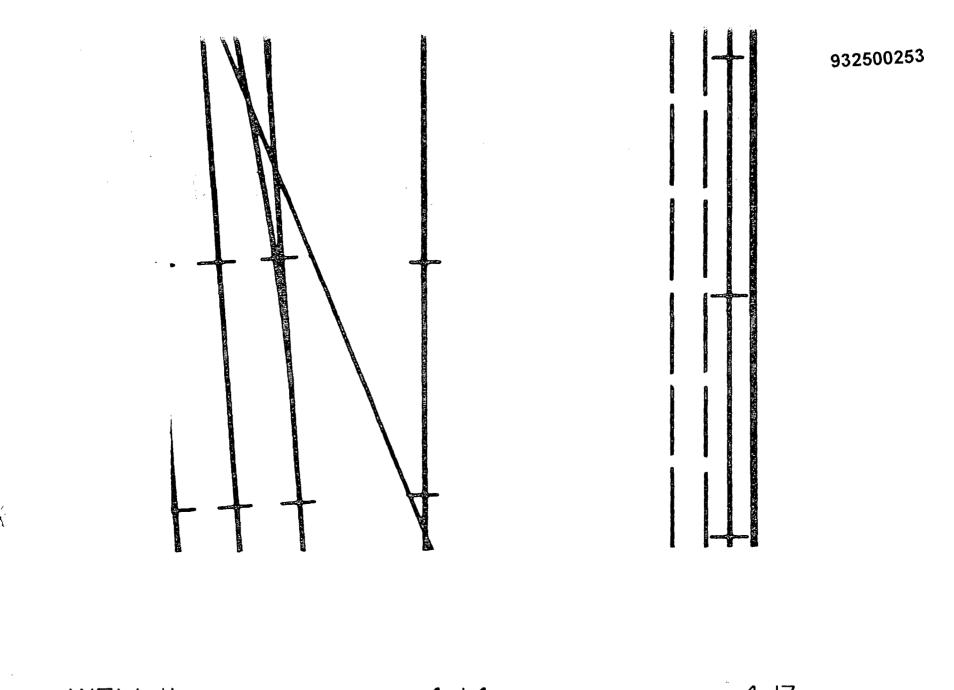
	pling	Total PCB's
	ation	<u>ug/g</u>
11-4	0-2'	9.7
	2-4'	9.7 4.9 1.5
	4-6'	
	4-6'(Dup)	<1.0
11-5	0-2'	42.
	4-6 *	7.9
11-6	0-2'	<1.0
	0-2'(Dup)	1.5
	2-4 *	<1.0
	4-6 *	<1.0
11-7	1-2'	1.0
	2-4'	<3.0
11-8	4-6'	<1.0
	6-8'	<1.0
11-9	0-6"	82
	0-6"(Dup)	68
	2-3'	<5.0
	4-5'	<5.0
	6-7'	<5.0
	8-9'	
11-10	0-6"	<5.0 85. → DEATH
11-11	0-6"	1300.
	2-3'	<5.0
	4-5'	<5.0
	6-7'	6.5
	8-9'	<5.0
	10-11'	<5.0
11-12	0-6"	660.
11-13	0-2'	<1.0
	4-6'	<1.0
11-14	0-2'	1.0
	4-6'	<1.0

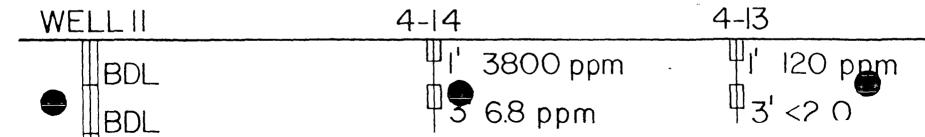
# TABLE A-7 (Continued) TOTAL PCB'S IN SAMPLES COLLECTED May 2-10, 1985 AT&T Kearny Works

	pling	Total PCB's	
	ation	ug/g	
11–15	0-2'	<1.0	
	2-4'	<1.0	
	6-8'	<1.0	
11-16	2-4'	<1.0	
	6-8'	<1.0	
11-17	4-6 *	<1.0	
	6-8'	<1.0	
11-18	0-2'	160.	
	2-4	2.7	
	4-6'	5.5	
11-19	0-6"	3400.	
	3-4'	<5.0	
	5-6'	<5.0	
	7-8	6.2	
11-20	0-6"	430.	
	3-4'	<5.0	
	5-6'	16.0	
	9-10'	<5.0	
	11-12'	<5.0	
11-21	0-2'	33,000	1-21
	2-3'	89,000	Į.
	2-4'	17,000	
	4-6'	10,500	
	7-8'	1650	
	9-10'	690	
	11-12'	<5.0	
11-22	2-3'	37	
	4-5'	48	
	7-8'	<5.0	
	9-10'	<5.0	
	11-12'	<5.0	



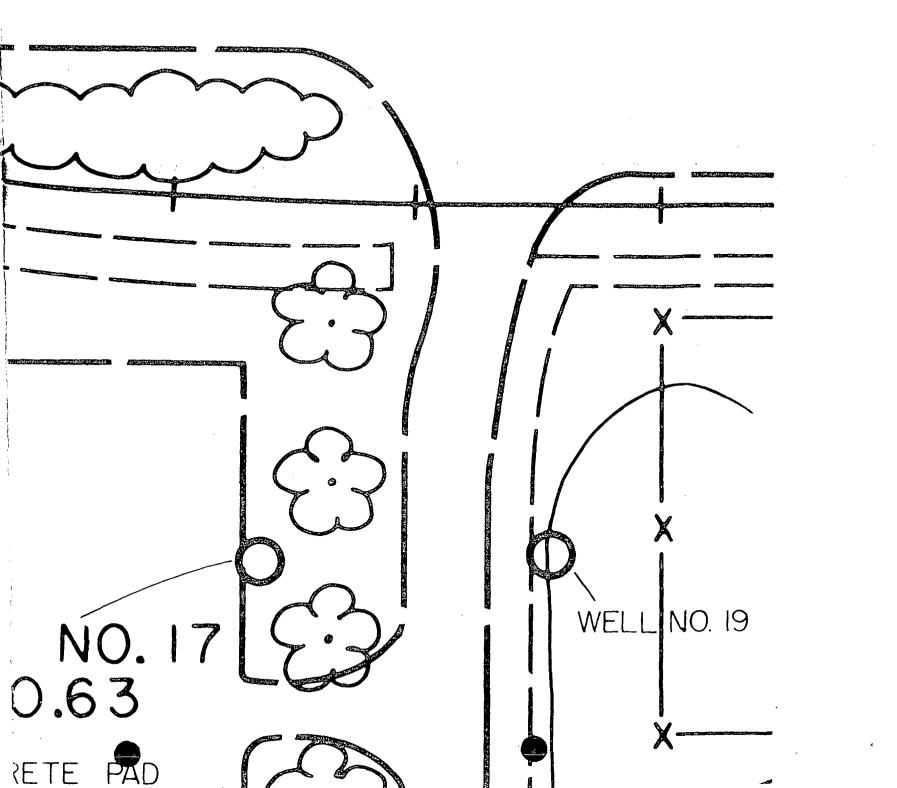


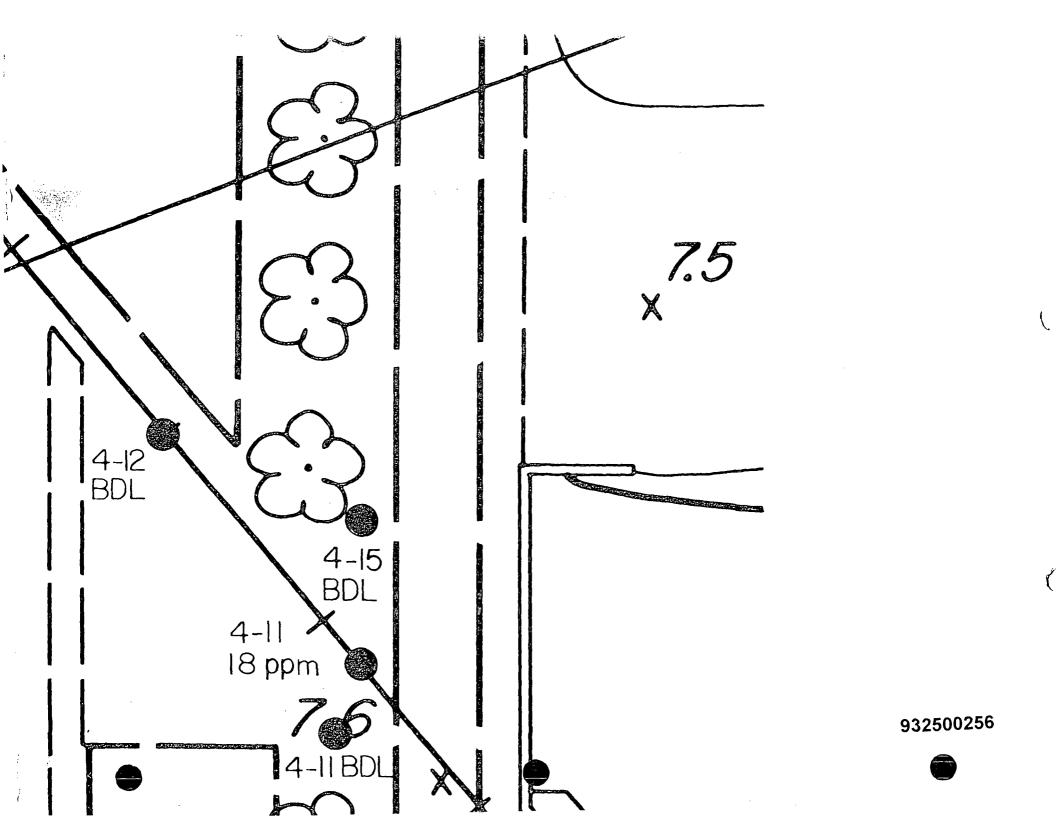


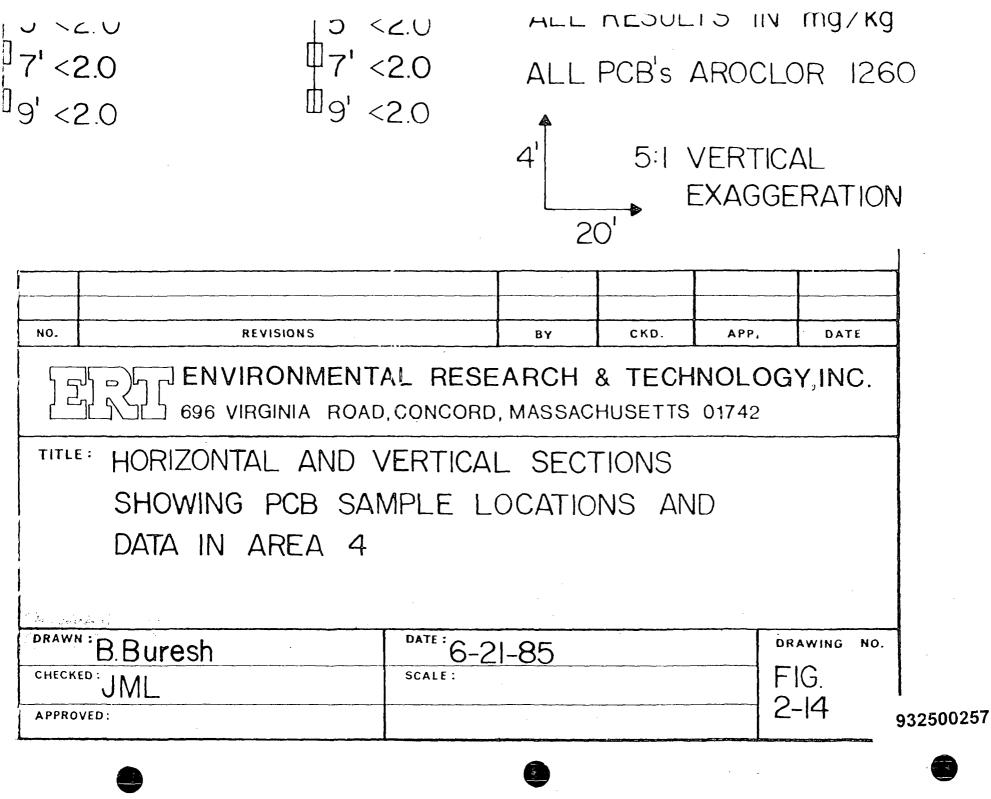


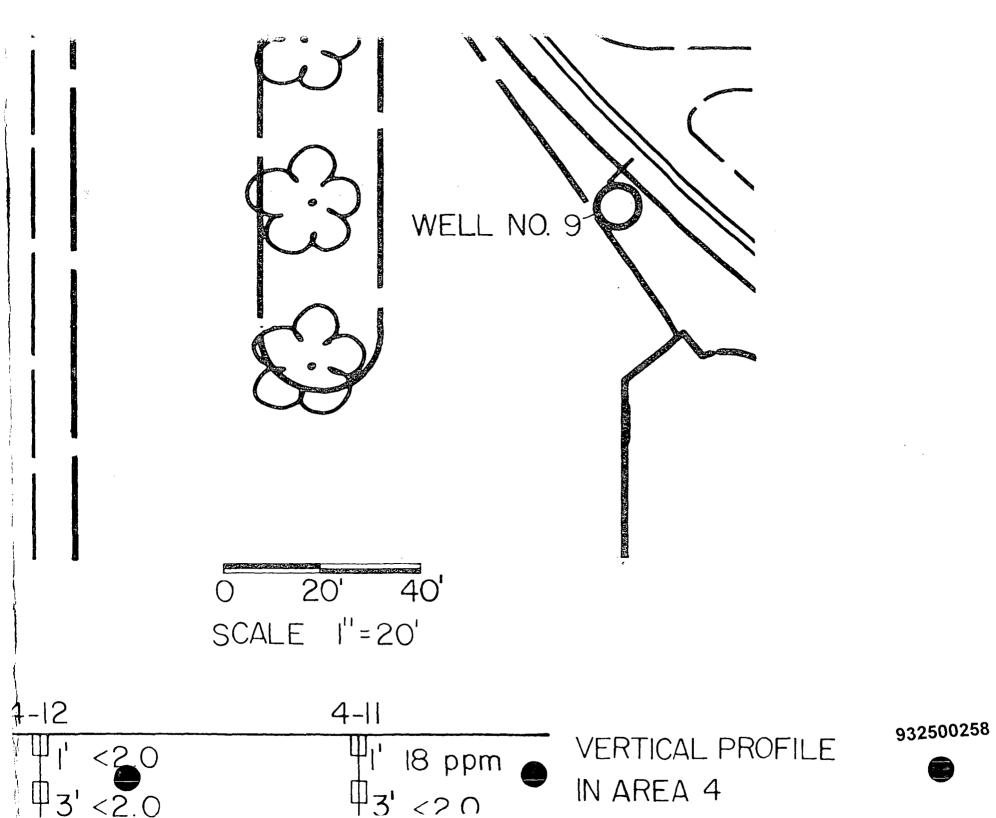
7' <2.0

7' <2.0









(

<sup>1</sup>7' <2.0

9' < 2.0

7' <2.0

NO. REVISIONS

ENVIRONMENTAL RESEAR
696 VIRGINIA ROAD, CONCORD, MA

SHOWING PCB SAMPLE LOCADATA IN AREA 4

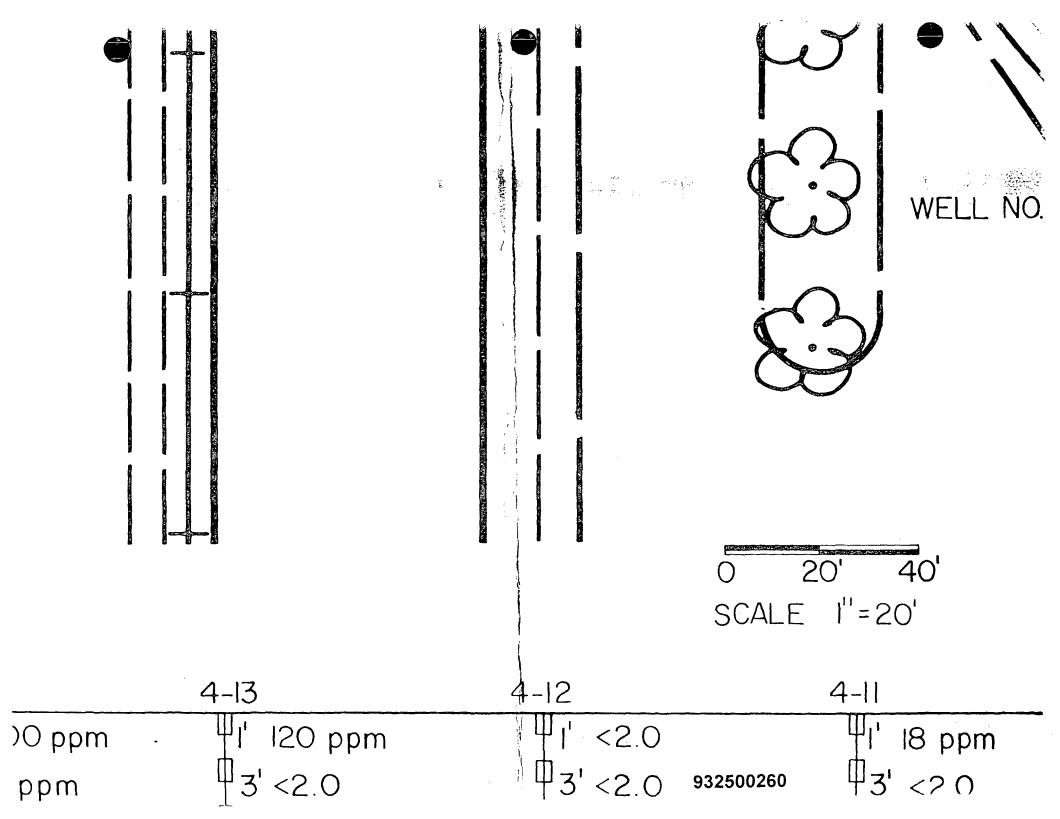
DRAWN : B. Buresh

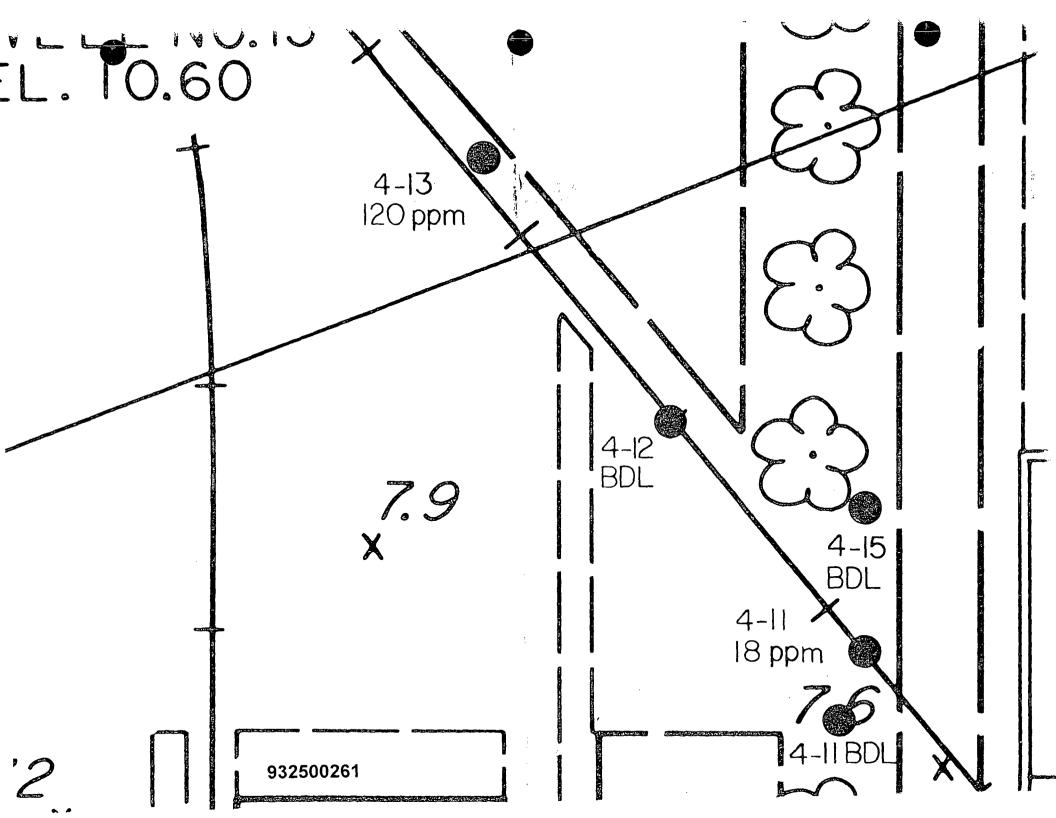
CHECKED : JML

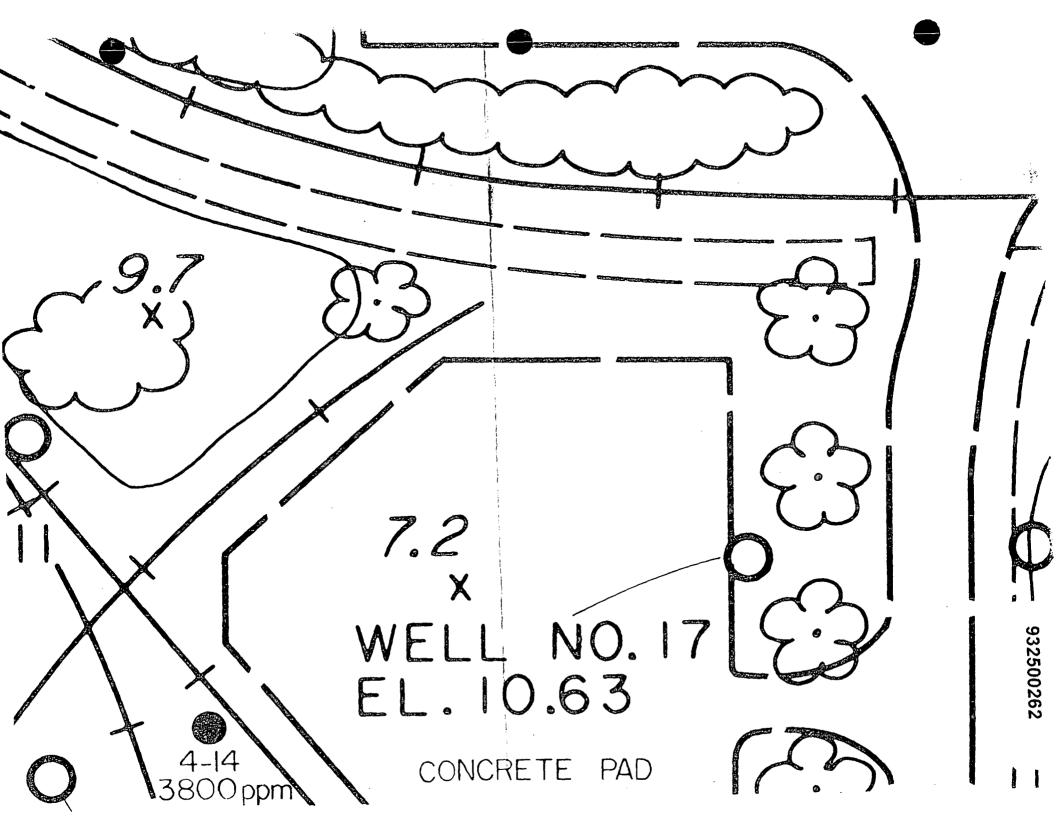
APPROVED:

DATE : 6-21-85

SCALE :









### COMSAT COMPANY

ENVIRONMENTAL RESEARCH & TECHNOLOGY, INC.

696 VIRGINIA ROAD, CONCORD, MASSACHUSETTS 01742, USA, (617) 369-8910, TELEX: 923 335 ENVIRORES CNCM, CABLE: ERTCON

ERT Document No: D367-000 ERT Reference No: 122-RNB-013

August 19, 1985

Ms. Maria Kent Bureau Of Industrial Site Evaluation Division Of Waste Management CN028 Trenton, New Jersey 08625

Additional soil sampling for PCB contamination in area 4,5,6

at AT & T Technologies Kearny Works, Kearny, New Jersey

Reference: ERT, Inc. "Amended Environmental Clean-up Plan, Kearny Works

AT & T Technologies Inc." Document D367-200, July 1985.

Dear Ms. Kent:

In accordance with the referenced report, ERT has performed the additional soil sampling and analytical testing in area 4,5,6 at the subject site. Soil sampling was conducted on July 15, 1985 and analysis began on July 16, 1985. Soil sampling and analytical procedures were conducted in conformance with the standard operating procedures outlined in Appendix B of the Amended Environmental Clean-up Plan.

Sample locations are shown on Figure 2-6 attached. The results of the analysis are detailed in the following report. Based upon these results, we have revised the excavation/disposal plan for this area. The revised plan is shown on Figures 2-14 attached.

If you have any questions about the sampling, analysis or revised excavation/disposal plan, please do not hesitate to contact me.

Sincerely,

Robert N. Block, P.E.

Senior Geotechnical Engineer

RNB:kac

cc: Chris Tranchetti

932500263

ANALYSIS OF SOIL SAMPLES
FROM THE AT&T SITE
KEARNY, NEW JERSEY
ERT Document 0005-332
July, 1985

 $\label{eq:prepared for AT&T TECHNOLOGIES INC. }$  AT&T TECHNOLOGIES INC.

Prepared by

3

Analytical Chemistry Laboratory
Environmental Research & Technology, Inc.
696 Virginia Road
Concord, Massachusetts 01742

### INTRODUCTION

This report represents the results of analysis conducted on a series of soil samples submitted to ERT on July 16, 1985. The soil samples were to be analyzed for polychlorinated biphenyls, specifically the AROCLOR 1260.

### Sample Receipt and Chain of Custody

Routine inspection of the samples revealed them to be packaged properly and received in good condition. Comparison of sample labels with the accompanying chain of custody records verified sample identification and specific analyses requested. Upon receipt, information from the submitted samples was recorded in the Master Log Book and the samples were assigned ERT Laboratory Control Numbers. These unique sample labels were affixed to respective sample containers and subsequently utilized throughout the laboratory analysis procedures for positive traceability.

## Analytical Procedures

The submitted soil samples, appropriate laboratory method blanks, laboratory duplicate samples, and laboratory fortified samples were analyzed for AROCLOR 1260 according to procedures (modified) as outlined in EPA Methods 3550 and 8080, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, US EPA, SW846, 2nd Ed, July, 1982.

#### Quality Control Procedures

Standard quality control procedures were implemented for all analyses. Laboratory method blanks and laboratory control samples were analyzed along with submitted samples. The results of quality control analyses were reviewed by the laboratory quality control coordinator to insure compliance with established control limits.

### Results of Analysis

A summary of the results for the submitted samples are presented in the attached tables. Results for the analysis of laboratory duplicated samples and laboratory prepared (fortified) quality control/quality assurance samples are also presented in attached tables.

TABLE 1 SUMMARY OF ANALYTICAL RESULTS POLYCHLORINATED BIPHENYLS IN SOIL

Client:

AT&T

Sampling Location: Kearny, New Jersey

Sampling Date:

15 July 1985

ERT No.	Field Identification	Concentration of PCB's (as AROCLOR 1260)
29086	1, 3-6"	12
29087	1, 12-15"	BDL
29089	2, 3-6"	4100
29090	2, 6-12"	17000
29091	2, 12-18"	24
29092	3, 3-6"	7.0
29093	3, 6-12"	3.3
29095	4, 3-6"	BDL
29098	5, 3-6"	BDL
29100	6, 3-6"	BDL
29102	7, 3-611	BDL
29105	8, 3-6"	BDL
29108	9, 3-6"	BDL
29111	10, 3-6"	BDL
29114	11, 3-6"	3.5
29115	11, 12-18"	BDL
29117	12, 3-6"	BDL
29118	13, 3-6"	BDL
29119	14, 3-6"	BDL
29120	15, 3-6"	BDL
29121	16, 3-6"	BDL
29122	17, 3-6"	BDL
29123	18, 3-6"	BDL
29124	19, 3-6"	BDL
29125	20, 3-6"	BDL
	•	

Results reported in ug/g (part per million) BDL = Below Detection Limit, 2.5 ug/g

TABLE 2
SUMMARY OF ANALYTICAL RESULTS
LABORATORY DUPLICATED SAMPLES

		Concentration of PCB's	5
ERT No.	Field Identification	(as AROCLOR 1260)	Mean
29089	2, 3-6"	5000 3200	4100
29098	5, 3-6"	BDL BDL	BDL
29117	12, 3-6"	BDL BDL	BDL
29124	19, 3-6"	BDL BDL	BDL

Results reported in ug/g (part per million)
BDL = Below Detection Limit, 2.5 ug/g

TABLE 3
SUMMARY OF ANALYTICAL RESULTS
LABORATORY FORTIFIED QUALITY CONTROL SAMPLES

ERT No.	Amount Fortified (ug)	Amount Recovered (ug)	% Recovery
QA-1	93	82	88
QA-2	467	410	88



### A COMSAT COMPANY

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696 VIRGINIA ROAD, CONCORD, MASSACHUSETTS 01742, USA, (617) 369-8910, TELEX: 923 335 ENVIRORES CNCM, CABLE: ERTCON

ERT Document No. D888-420 ERT Reference No. 122-RNB-039

November 25, 1985

Mr. Joseph Goliszewski Bureau of Industrial Site Evaluation NJDEP Division of Waste Management CN028 Trenton, New Jersey 08625

Subject: Results of Supplemental PCB Analysis in Area 4,5,6 AT&T Technologies'

Kearny Works, Kearny, New Jersey

Reference: ERT, Inc. Amended Environmental Clean-up Plan, Kearny Works

AT&T Technologies, Inc. Document D367-200, July 1985

ERT, Inc. Additional Soil Sampling for PCB Contamination in Area 4,5,6 ERT Reference No: 122-RNB-013, August 19, 1985

NJDEP Letter regarding PCB sampling dated 17 September 1985

Dear Mr. Goliszewski:

As requested by the NJDEP, we have conducted additional sampling to delineate the extent of PCB contamination in area 4,5,6. Figure 2-14 (attached) has been revised to show the locations of additional sampling. The referenced letter (ERT, August 19, 1985) detailed the results of sampling at locations 1 through 20. Sampling locations 21 through 37 were conducted as part of this supplemental analysis. Sampling methodologies were similar to those used for samples 1 through 20 except for samples 33 through 37. These 6 samples were obtained with a hand trowel to a depth of 6 inches. Deeper samples were not obtained at these locations.

The results of the supplemental analysis are presented in Table 1 (attached). Revised excavation boundries are presented on Figure 2-15 (attached).

We are available to discuss the results of this analysis or the proposed excavation boundries with you. Please call if questions arise or we can be of further assistance.

Sincerely,

Robert N. Block, P.E.

Senior Geotechnical Engineer

cc: Chris Tranchetti, Bill Duvel

TABLE 1

# ERT ANALYTICAL LABORATORY DATA REPORT ON SOIL SAMPLES

CLIENT: AT&T Kearny		DATE:	10/29/85
Sample ID	ERT No.	PCB 1260 ug/g	
21-1, 0-6' 21-2, 6-12' 22-1, 0-6' 23-1, 0-6' 24-1, 0-6' 24-2, 6-12' 25-1, 0-6' 25-2, 6-12' 26-1, 0-6' dup 27-1, 0-6' 28-1, 0-6' 29-1, 0-6' 29-2, 6-12' 30-1, 0-6' 30-2, 6-12' 31-1, 0-6'	31457 31519 31463 31493 31475 31476 31481 31482 31487 31530 31493 31499 31506 31607 31512 31513	3.3 BDL 4.8 BDL 49 4.2 18 BDL 4.7 2.4 BDL 6.4 BDL 12 BDL 7.4	
32-1, 0-6	31524	BDL	
33-2, 6-12'  33-1 33-1 dup 34-1 34-1 dup 35-1 35-1 dup 36-1 36-1 dup 37-1 37-1 dup	31470  31714 31715 31716 31717 51718 31719 31720 31721 31722 31723	7.1 11 9.1 8.1 2.1 BDL 9.6 8.2 2.4 2.6	

BDL= below detection limit = 2.0 ug/g

## WARREN, GOLDBERG, BERMAN & LUBITZ

A PROFESSIONAL CORPORATION
COUNSELLORS AT LAW

II2 NASSAU STREET
P. O. BOX 645
PRINCETON, NEW JERSEY 08542
(609) 924-8900

219 EAST HANOVER STREET TRENTON, NEW JERSEY 08608 (609) 394-7141

TELECOPIER (609) 924-3486

PLEASE REPLY TO: PRINCETON

November 27, 1985

Mr. Anthony J. McMahon, Chief Bureau of Industrial Site Evaluation Division of Waste Management New Jersey Department of Environmental Protection CN 028 Trenton, New Jersey 08625 DEC 2 May

Re: Western Electric-Kearny Works Plant 100 Central Avenue Kearny, Hudson County ECRA Case No. 84025

Dear Tony:

This is in further response to your letter of September 17, 1985 and our previous telephone discussion concerning the delineation of the extent of PCB contamination in areas 4, 5 and 6. As agreed, AT&T conducted additional sampling in the areas south/southwest of field identification locations 1, 2 and 3; east of location 1; and north/northwest of location 11 in accordance with procedures identified in the approved July 8, 1985 Cleanup Plan. The original and a copy of this material is enclosed.

The results of this supplemental PCB analysis from ERT is set forth in Table 1. This material is submitted together with sampling plan drawing numbers fig. 2-14 and 15. The results of the sampling conducted in areas 4, 5 and 6 and in the vicinity of well number 11 are set forth on fig. 2-14. The revised plan of excavation which has been implemented based upon this testing is set forth in fig. 2-15. As a result of this additional testing, the extent of PCB contamination in these areas has been fully delineated. The contamination in the vicinity of test point number 2 has been determined to be extremely localized both horizontally and vertically.

AT&T has filed monthly status reports with the Bureau setting forth the progress of remediation pursuant to the Cleanup Plan. As was indicated in the report of November 7, 1985 to Maria Kent, soil cleanup activities as set forth in section 2 of the Cleanup Plan and the other cleanup activities as set forth

# WARREN, GOLDBERG, BERMAN & LUBITZ A PROFESSIONAL CORPORATION COUNSELLORS AT LAW

Mr. Anthony J. McMahon November 27, 1985 Page 2

in section 4 of the Cleanup Plan are substantially completed. It is anticipated that the remediation required in sections 2 and 4 of the Cleanup Plan will be completed and the details of the cleanup included within the monthly progress report to be submitted on or about December 8, 1985. The Kearny site is available for review by your staff as this cleanup is being carried to completion.

Section 3 of the Cleanup Plan concerning ground water is also progressing and a more complete statement and monthly progress report will also be submitted in early December. Because of the nature of the remediation required in connection with the ground water, this one aspect of the Cleanup Plan cannot be completed in the immediate future.

AT&T requests that the remediation work performed pursuant to the remainder of the Cleanup Plan, excluding Section 3, be reviewed and approved by your staff as promptly as possible after we have submitted ERT's certification concerning the work performed. Under the agreement between AT&T and the buyers, AT&T has a continuing obligation for maintaining the property until ECRA review and approval is obtained as to the remediation pursuant to sections 2 and 4. Your cooperation in connection with this review, therefore, would be greatly appreciated.

Should there be any questions concerning any of the information submitted herewith, we would ask that you contact our office promptly so that we can respond immediately.

Very truly yours,

Name Goldberg

David J. Goldberg

DJG/bg Enc.



# State of New Jersey Department of Environmental Protection and Energy

Division of Responsible Party Site Remediation CN 028 Trenton, NJ 08625-0028

Scott A. Weiner Commissioner

Karl J. Delaney Director

AUG 11 1932

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
Nicholas W. Capuano
AT & T
131 Morristown Road
Basking Ridge, NJ 07920

RE: Western Electric Co., Inc. - Kearny Works (Western Electric)
Kearny Town, Hudson County
ECRA Case #84025

Dear Mr. Capuano:

As part of the Environmental Cleanup Responsibility Act review process, Western Electric was inspected by a representative of the Bureau of Environmental Evaluation and Cleanup Responsibility Assessment on July 22, 1992. The inspection was conducted to ensure that sampling was conducted in accordance with the NJDEPE's letter dated June 9, 1992. All sampling was performed in accordance with said letter.

During the inspection approximately eleven drains, with unknown discharge points, were observed in the former drum storage pad. When a photo ionization detector screened the water inside the discharge pipe of one of the drains, total volatile organic compounds were detected at 22 parts per million. Due to the potential impact to the environment, Western Electric shall determine the discharge point of the former drum storage pad drains (plumbing diagrams, dye test, etc.). Western Electric shall submit documentation on the method used to determine the discharge points and the location of the outfalls to the NJDEPE, within 30 days of the receipt of this letter.

If you have any questions regarding this letter, please contact the Case Manager, Carol Lynn J. Heck, at (609) 633-7141.

Sincerely,

Tessie W. Fields Section Chief

Bureau of Environmental Evaluation and

Cleanup Responsibility Assessment

131 Morristown Road Basking Ridge, NJ 07920

September 3, 1992

N.J. Department of Environmental Protection & Energy Division of Responsible Party Site Remediation Ms. Carol Lynn Heck CN - 028 Trenton, New Jersey 08625-0028

Re: AT&T Kearny Works

Kearny, NJ

ECRA Case #84025

Dear Ms. Heck:

In response to your August 11, 1992 inquiry concerning the drains located in the former drum storage pad, I have enclosed the following documentation as prepared by ENSR Consulting and Engineering for AT&T:

Attachment No. 1: This attachment identifies the fourteen catch

basins that were cleaned on the subject

concrete pad.

Attachment No. 2: Included in this attachment are copies of the

relevant pages of the certification document (Document Number 888-40, February 1986) submitted to and approved by the NJDEPE. Item No. 3 on page 2-1 certifies ERT observations

that the peripheral soil was removed, the concrete pad was swept off, and the catch basins were vacuumed, roto rooted, and jet cleaned. All residual material was collected and disposed of off-site in a permitted landfill.

Attachment No. 3: This attachment includes copies of the relevant

pages of ERT's daily field log. The text marked with asterisks on page 151 document my

observations of the catch basin cleaning

procedures.

Attachment No. 4:

This attachment includes a copy of the contractor's daily work log that identifies the snaking and jetting of the subject catch basins was completed.

The enclosed documentation should answer your concerns to these drains. As the documents demonstrate all these drains were cleaned out and all waste removed from the site and disposed according to regulatory requirements.

Attachment No. 2 provides the certification that the clean up of "Other Clean Up" has been completed according to the NJDEP approved Environmental Clean Up Plan.

If you have any questions or comments, please call me at (908) 204-8268.

Sincerely,

Nicholas W. Capuano Kearny ECRA Clean Up Manager

Nelsla W Capiens

ATTACHMENT NO. 1

r=					
4	AS BULT	SD-	RNR	PNB	12
3	CHANGES TO AREAS 33 8 34; ADDED IN PLACE VOLUMES	SD	$\frac{7}{2}$ sins		10-8 85
5	CHANGE TO AREAS (4,5,6), 7, 8A, 8B, 11A, 11B, 14, (21,22A),	21,22B), 31,	37,38,9		89-85
	CHANGES TO AREAS II, 15, 21, 22, 26, 44, 48, 49	мем	JML		5-20-85
NO.	REVISIONS	ВУ	CKD.	APP,	DATE



# TENVIRONMENTAL RESEARCH & TECHNOLOGY, INC.

696 VIRGINIA ROAD, CONCORD, MASSACHUSETTS 01742

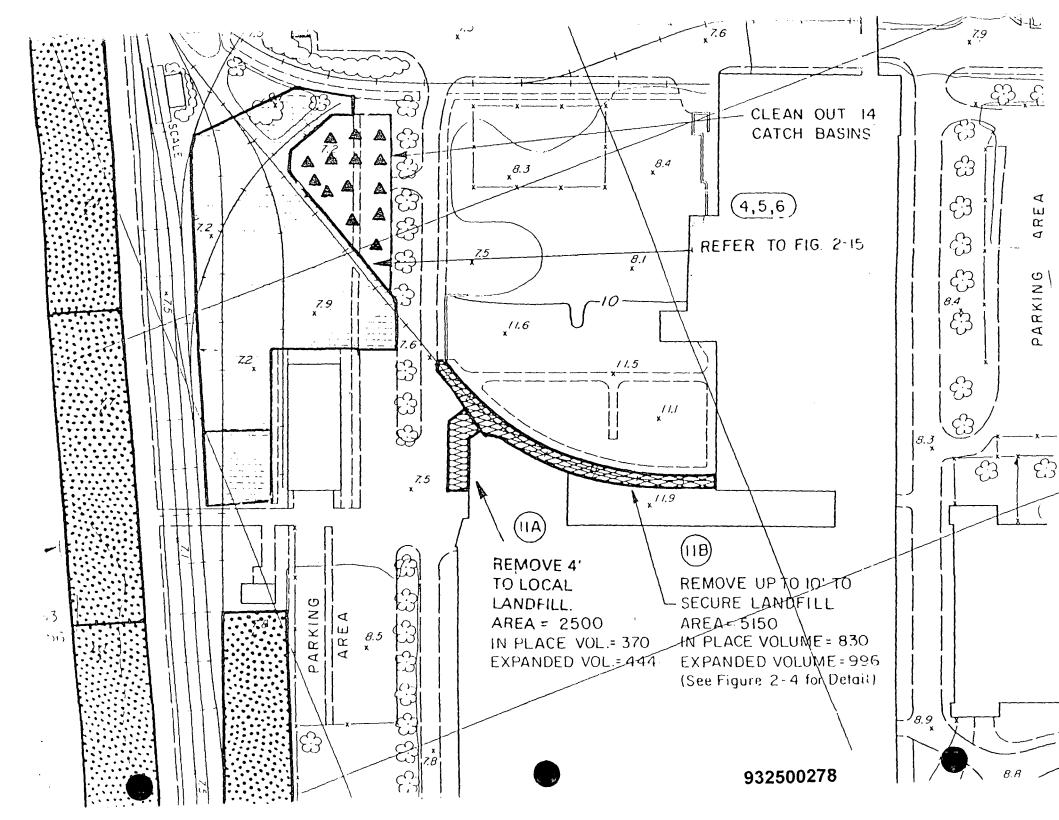
TITLE:

COMPLETED SOIL EXCAVATION

AT&T KEARNY WORKS

WILLIAM A. DUVEL Professional Engineer Wm a Drive of 1/11/8/ N.J. Lic. No. GE 28465

DRAWN:	M. McCARTNEY	DATE: 3-22-85	DRAWING NO.
CHECKED:		scale:  " = 100'	FIG. 2-16
APPROVED:			2 10



ATTACHMENT NO. 2

CERTIFICATION OF ECRA OTHER CLEANUP
AT&T KEARNY WORKS

Document Number 888-440
February 1986



ENVIRONMENTAL RESEARCH & TECHNOLOGY, INC. ATLANTA · CHICAGO · CONCORD, MA · FORT COLLINS, CO. HOUSTON · LOS ANGELES · PITTSBURGH · WASHINGTON, DC.

# CERTIFICATION OF ECRA OTHER CLEANUP AT&T KEARNY WORKS

Document Number 888-440
February 1986

Prepared for AT&T TECHNOLOGIES, INC.

Prepared by

ERT, A Resource Engineering Company 696 Virginia Road, Concord, Massachusetts 01742

5797D PC888-430

#### CERTIFICATION OF OTHER CLEANUP

ERT certifies that it has carried out a quality assurance and inspection program for the site cleanup activities conducted by various contractors engaged by AT&T Technologies, Inc. (AT&T) to effect the cleanup of AT&T's Kearny Works, as described in the Amended Environmental Cleanup Plan, Kearny Works, AT&T Technologies, Inc. (ERT Document D367-200). This Plan was prepared by ERT and approved by the New Jersey Department of Environmental Protection (NJDEP) on July 8, 1985. The quality assurance and inspection plans followed by ERT are attached. On the basis of the work conducted by ERT in accordance with these plans, ERT has determined that the cleanup work conducted by the various contractors for Other Cleanup\* has been completed and is in conformance with the requirements of the Amended Environmental Cleanup Plan. This document describes the work conducted by ERT and presents the basis for this certification.

Dr. William A. Duvel, Jr., P.E.

Senior Program Manager

\*Separate Certifications for (1) <u>Soil Cleanup</u>, and (2) <u>Ground Water</u> <u>Cleanup</u>.

5797D 888-430

### 2. STORAGE FACILITIES

The following paragraphs discuss the activities taken in the following storage facilities in a clockwise order of rotation beginning in the lower left corner of Drawing 8452-120579-D (see back pocket).

- 1. Building 25, Grid Index J-4, has 32 adjacent underground tanks. Each of these tanks had been emptied and filled with sand/cement at some time unrecorded in the past. To verify that this condition was true, AT&T opened the manholes accessing the tanks and found they do contain sand/cement materials to the top and contain no liquids. ERT reviewed an AT&T memo dated July 5, 1985, that requested an additional week of work for the person opening the manhole accessing the tank. A spot check by ERT of two manholes showed they are filled with sand/cement.
- 2. Silt pumped from Powerhouse cooling water tunnels was deposited at Grid Index J-2 several years ago. The area where the silt was deposited was excavated and removed in conjunction with Area 2 soil excavation. See Certification of ECRA Soil Cleanup, ERT Document No. D888-430, for details of ERT certification of soil removal.
- 3. Two storage pads:

X

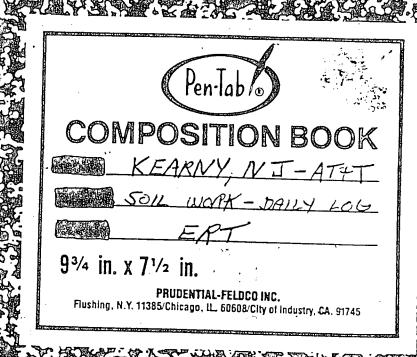
a) Concrete pad adjacent to soil area 4, 5, 6. ERT observations document that the periferal soil was removed, the concrete pad was swept off, and the catch basins were vacuumed, roto rooted, and jet cleaned.

All residual material was collected and disposed of off-site in a permitted landfill as required by state and federal solid waste regulations (see also soil excavation in Area 4, 5, 6 in Certification of ECRA

Soil Cleanup, ERT Document No. D888-430 for details of ERT certification of soil removals and catch basin cleanout).

- b) RCRA storage area. ERT observations document that residues and standing liquids in this area were mechanically removed by scraping and vacuuming. The area was further cleaned by high pressure water washing and vacuuming the wash water. A review of AT&T Work Orders SP926 and W-47156 document pre-cleanup measures. The pre-cleanup measures included the identification and disposal of all drums by Chemical Waste Management (CWM), Newark, N.J. (ref. manifest listing March 1985 to July 1985).
- 4. Four 10,000-gallon underground tanks located south of Building 83 at Grid Index H-3. Three tanks were drained and filled with sand approximately 15 years ago and required no action. The fourth tank contained diesel oil. The tank was water/steam cleaned, nitrogen purged, excavated, and cut up by CWH, and removed from the area for salvage by the new owner. The residual oils were removed and sent to Flowen Oil Company for reclaiming. The above work was performed by CWH and witnessed by ERT.
- 5. 840,000-gallon oil tank at Grid Index G-3. ERT observed the removal of residual sludge and oil, venting and cleaning the tank using high pressure water/steam, and flushing the underground transfer lines with water to and from the day tank and the powerhouse. ERT inspected the interior of the tank to verify that it was clean. Review of 14 NJA manifests labeled "Waste Oil and water, recycle #6 Fuel Oil," to Flowen Oil Company documents the disposal of the tank cleanout. Review of 12 NJA manifests labeled "Hazardous Waste Liquid (N.O.S)" identifies that the residual sludges and washdown materials were disposed of at the SCA (Newark) treatment plant.

ATTACHMENT NO. 3



HOATSINK ROOM - This news was preserve washed teday + I observed & O.K'd the entire Bld 17/ delay. a swept yesterday I material as drummed. The heavy rown - of yesterday flooded a 13 of the area Theo water was poor med out today to enable the area to be preserve washed. This water was also ovacummed up. This area was completed today. MONDAY, NOVEMBER 25,1985 WEATHERS CLOUDY, LOW YO'C Old 35: The est building

\_\_\_ preserred washed inside I out on\_ Saturday. The deck was also washed to 10 Grem the outside 1 of the building. River terminal had some of their equipment & materials around the building & cum\_ made their lost effect in cleaning around it. Bld185: Stelzerled on duct walk was removed I cruehed inside a roll-off bin. Bulding 85 ie now constite 40, K. 'd. \_ 14A Z. Warte Storage Area: Asia was swept up for a funal time (+ natisial was drummed) -- ! The area was O.K. a tiday. Drummed notinal: All mice natival - types from glove, uto, was drummed & prepared for Shymest temerror to Wadel City

Toward November 26,1985  WEATHER: Closey, Low Yo's  Area 2/22: broding completed  today.  Lotch Basins: Basins on concrete  pod were jet cleaned today. En-
Lateh Basino? Basino on concrete pad were jet cleaned today. En-
Lateh Basine? Basine en concrete pad were jet cleaned today. En-
in the drain that led into the manhole. The plug was removed.  Cotch Baseine ever competed talays.  Area 4,5,6: Dan Ressir Association

ATTACHMENT NO. 4

### NOTICE ABOUT UNSCANNABLE MAP

THIS MAP CAN BE FOUND IN THE SITE FILE LOCATED AT: U.S. EPA SUPERFUND RECORDS CENTER, 290 BROADWAY, 18<sup>TH</sup> FLOOR, NY, NY 10007. TO MAKE AN APPOINTMENT TO VIEW THE MATERIAL PLEASE CONTACT THE RECORD CENTER AT (212) 637-4308.

Figure 2	-S TRANSEC	RMFF	25
OFF LATE		ZINŲILS I	
DESIGNED BY	DRAWN BY	CHECKED	BY
•	APPROVAL	DEPT.	
= : : :	ELECTRIC COMP	•	
8452	AVING NO. 2-120579	- В	35

### NOTICE ABOUT UNSCANNABLE MAP

THIS MAP CAN BE FOUND IN THE SITE FILE LOCATED AT: U.S. EPA SUPERFUND RECORDS CENTER, 290 BROADWAY,  $18^{TH}$  FLOOR, NY, NY 10007. TO MAKE AN APPOINTMENT TO VIEW THE MATERIAL PLEASE CONTACT THE RECORD CENTER AT (212) 637-4308.

PLOT PLAN OF	BUILDING .	. 01
STORM WATER MAINS	SEPT. NO. KEARNY	
	1 "= 100'	
SKIF Lonith APPROVALS	SRAWING NO.	·
WESTERN ELECTRIC COMPANY, INC. ENGINEER OF MANUFACTURE	   195-187	6 A
•	932	50029
·	-	

### NOTICE ABOUT UNSCANNABLE MAP

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	CHANGES TO AREAS 11, 15, 21, 22, 26, 44, 48, 49	MEM	JML		
NO.	REVISIONS	8Y	CKD.	APF.	5-20-85 DATE
2	ENVIRONMENTAL RESI				Y,INC.
TITLE	SOIL REMOVAL PROFILE AT&T KEARNY WORKS	<i>:</i>		. ==	
	3		•		
GRAWI	M. McCARTNEY	22 - 85		ar.	AWING NO.
jan 3x	ro: ' in	4 (7)() <sup>1</sup>	932500294		F10.
		•	`		

Texaco Refining & Marketing

Facility Name: TEXACO REFINING AND MARKETING INC. Reporting Year:

1991

Street : 86 DOREMUS AVE

City : NEWARK State: NJ Zip: 071050000

County : ESSEX EPA ID: NJD986604544
Mailing Address: PO BOX 335 AVE A & W FRIST ST

Mailing City : BAYONNE State: NJ Zip: 070020000

Year: 1991 Total Waste Federal Wst. RCRA Waste Tons Generated: 3,954.30 755.60 755.60 Tons Shipped: 3,955.10 755.60 755.60

SIC Code(s): 5171

Contact: JOHNNY W HEARN Phone: 2014362200 Generator Status: Large Quantity Generator (LQG)

Storage Status : No RCRA-permitted or interim status storage

RCRA TDR Status : No on-site TDR; site has no plans to develop system Exempt TDR Status: No on-site TDR; site has no plans to develop system

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List of wastes generated by this facility:

Waste Desc.: SOIL CONTAINING LEAD, CONCRETE, SCRAP METAL AND PROTECTIVE

LOTHING. SOIL WAS FROM AREA BEING CLEANED UNDER ECRA

EPA Waste Code(s) for this generated waste-

D008 Lead

Tons Generated: 755.60

Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

MICHIGAN DISPOSAL, INC.

BELLEVILLE, MI System type: M111

Tons sent: 755.60 EPA ID: MID000724831

Waste Desc.: SOILTCONTAINING-PCB S. CSOILTWASTFROMTAREA BEING CLEANED TO THE UND LAND

ERECRA SOURCE\_OF PCB SUNKNOWN

This is state-only waste (no Federal waste codes).

State waste code(s): X751 Tons Generated: 446.70

Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

CWM CHEMICAL SERVICES, INC.

MODEL CITY, NY System type: M132

Tons sent: 446.70 EPA ID: NYD049836679

Waste Desc.: SOIL CONTAINING PETROLEUM HYDROCARBONS, CONCRETE, SCRAP

META

L AND PROTECTIVE CLOTHING. SOIL WAS FROM AREA BEING

CLEANED

UNDER ECRA

This is state-only waste (no Federal waste codes).

State waste code(s): X725 Tons Generated: 2,752.00 Tons Generated & Managed On-site: 0.00

This waste was sent off-site to-

UNKNOWN/BAD EPA ID

System type: M132
Tons sent: 2,752.80 EPA ID: OHP876000035